OXFORD STUDIES IN BYZANTIUM

Caliphs and Merchants

Cities and Economies of Power in the Near East (700–950)

FANNY BESSARD



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OXFORD
UNIVERSITY PRESS

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Great Clarendon Street, Oxford, OX2 6DP,
United Kingdom

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide. Oxford is a registered trade mark of
Oxford University Press in the UK and in certain other countries

First Edition published in 2020
Impression: 1

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data
Data available

Library of Congress Control Number: 2020945332

ISBN 978–0–19–885582–8

Printed and bound by
CPI Group (UK) Ltd, Croydon, CR0 4YY

Á ma mère
Á Daniel, Peter et Enzo

Acknowledgements

I discovered early Islamic history in 2004, while attending a seminar on the Umayyad desert castles at the University of Lyon II. Since then, my fascination for the Near East, its incredible Roman and medieval heritage, its religious and cultural diversity has developed, nurtured by my PhD supervisor Jean-Michel Mouton. I received unwavering inspiration, guidance, support, from Hugh Kennedy, Chris Wickham, Alan Walmsley, Andrew Wilson, Olivier Callot. They each showed an incredible willingness to nurture new researchers. It is from these that I have inherited a passion for scholarship, collaboration, and for introducing students to the richness of the period.

I have been fortunate to receive academic and financial support from institutions in France (University Lyon II and Lyon III, EPHE Sorbonne), in the Near East (Institut Français du Proche-Orient Ifpo, Department of Antiquities in Damascus, Palmyra, and ʿAmmān) and Britain (SOAS, University of St Andrews, University of Bristol, University of Oxford). The Near Eastern institutions (Ifpo and DoA) played a vital role in this study; they provided support for my fieldwork, and gave me access to their unique and invaluable archives, without which the project would not have been possible.

The British Academy and the Leverhulme Trust, who awarded me respectively a post-doctoral Newton grant and a Leverhulme Early Career fellowship were also instrumental in this project, offering security, time and funding to carry on my exploration of early Islamic cities and economies and publish the final results with OUP.

Thanks to the editors of Oxford Studies in Byzantium, and to James Howard-Johnston for his time and guidance.

My thanks also to colleagues and friends for kind and helpful readings, suggestions, and productive discussion during the course of this project: Khaled al-Asad, Sophie Berthier, Pascal Buresi, Fernando Cervantes, Paul Churchill, Kristoffer Damgaard, Fred Donner, Jean-Charles Ducène, Tim Greenwood, John Hudson, Richard Payne, Jean-François Salles, Mark Whittow, Donald Whitcomb. This list is not exhaustive, and my sincere thanks go to the many unnamed others for degrees of assistance during the journey. Thanks also to all the colleagues who shared with me their research and photographic material: Thilo Ulbert, Thomas Lepaon, Jacques Seigne, Jacques Thiriot, Eliezer Oren, Gérard Charpentier, Olivier Callot, Denis Genequand, Jean-Charles Balty, Frédéric Alpi, Julian Henderson, Oren Tal, Yael Gorin-Rosen, George Haggarty, Alan Walmsley, Danièle Foy.

This has been a long project, beginning with my MA over a decade ago. The resilience to continue and to complete this project has been provided by the constant encouragement and faith of my family. It is to them that *Caliphs and Merchants* is dedicated.

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The publisher and the author apologize for any errors or omissions in the above list. If contacted they will be pleased to rectify these at the earliest opportunity.

List of Abbreviations

AAAS	Annales Archéologiques Arabes Syriennes
AASOR	Annual of the American School of Oriental Research
ADAJ	Annual of the Department of Antiquities of Jordan
AJA	American Journal of Archaeology
AK	Antike Kunst
Annales ESC	Annales Economie, Société, Civilisation
BAAL	Bulletin d'Archéologie Antique Libanaise
BASOR	Bulletin of the American Schools of Oriental Research
BEO	Bulletin des Études Orientales
BSOAS	Bulletin of the School of Oriental and African Studies
BZ	Byzantinische Zeitschrift
CAH	The Cambridge Ancient History
CAR	Contract Archaeology Reports
DamMitt	Damaszener Mitteilungen
DOP	Dumbarton Oaks Papers
EHB	Economic History of *Byzantium*
EI	Encyclopédie de l'Islam
ESI	Excavations and Surveys in Israel
HA	Hadashot Arkheologiyot
HJAS	Harvard Journal of Asiatic Studies
IEJ	Israel Exploration Journal
INJ	Israel Numismatic Journal
INR	Israel Numismatic Research
JAOS	Journal of the American Oriental Society
JAP	Jarash Archaeological Project
JARCE	Journal of the American Research Center in Egypt
JAS	Journal of Asian Studies
JESHO	Journal of the Economic and Social History of the Orient
JMBRAS	Journal of the Malaysian Branch of the Royal Asiatic Society
JNES	Journal of Near Eastern Studies
JNSI	The Journal of the Numismatic Society of India
JQR	Jewish Quaterly Review, New Series

JRAS	Journal of the Royal Asiatic Society
JSAH	Journal of South-East Asian History
JSAI	Jerusalem Studies in Arabic and Islam
JSS	Journal of Semitic Studies
MBRAS	Malaysian Branch of the Royal Asiatic Society
MeditArch	Mediterranean Archaeology
NEA	Near Eastern Archaeology
ONS	Oriental Numismatic Society
PSAS	Proceedings of the Seminar for Arabian Studies
REI	Revue des Études Islamiques
REJ	Revue des Études Juives
RN	Revue Numismatique
SHAJ	Studies in the History and Archaeology of Jordan
TP	T'oung Pao
WA	World Archaeology

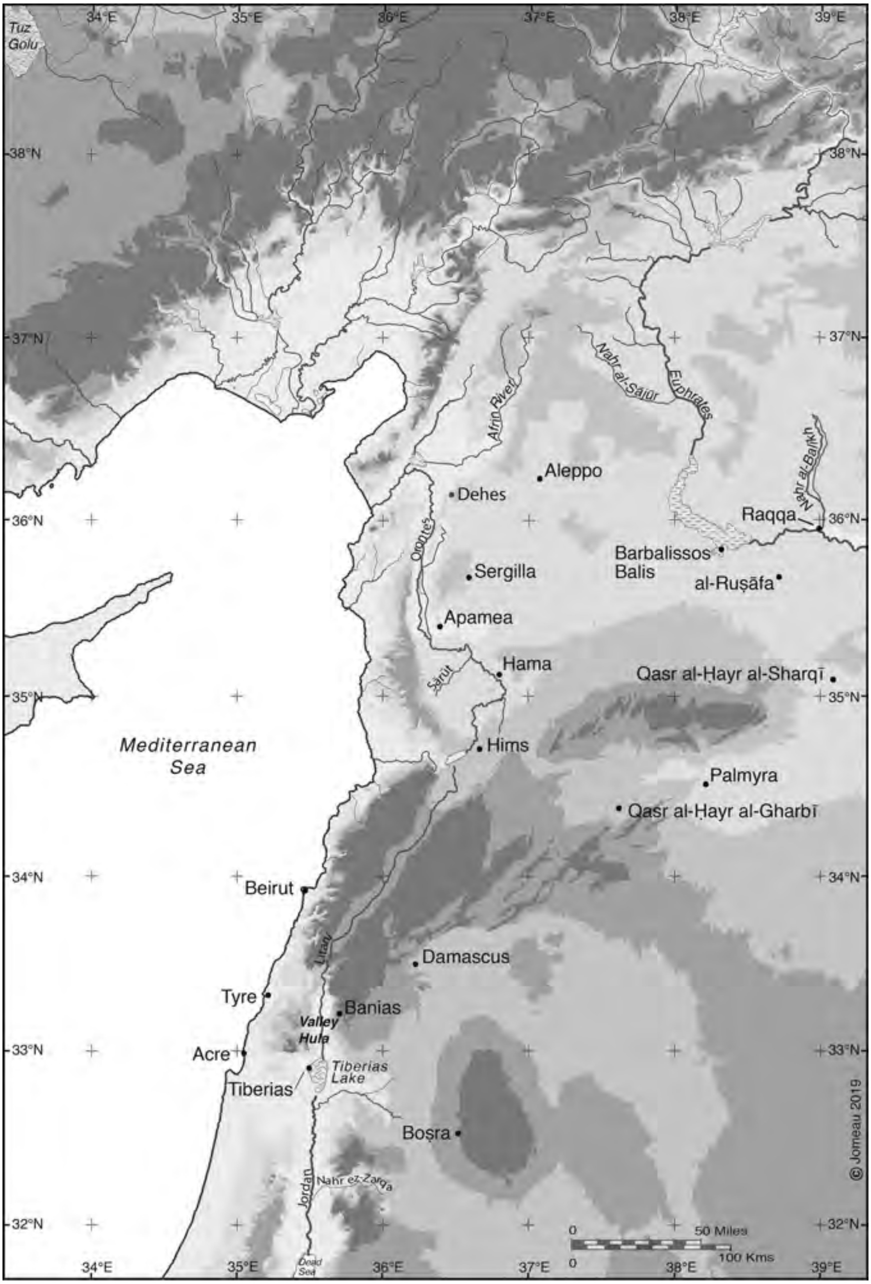
Notes on Transcription and Dates

If not otherwise specified, dates given in this volume are CE dates. However, if a double date is given (e.g. 99/717), the first is the Muslim hijrī date (AH) and the second is CE. Arabic personal names and names of towns are transliterated according to the rules of classical Arabic (e.g. Ǧazīra), except if there is a well-known English equivalent (e.g. Damascus or Palmyra). The transliteration system follows that of the *International Journal of Middle East Studies* (https://ijmes.chass.ncsu.edu/docs/TransChart.pdf).

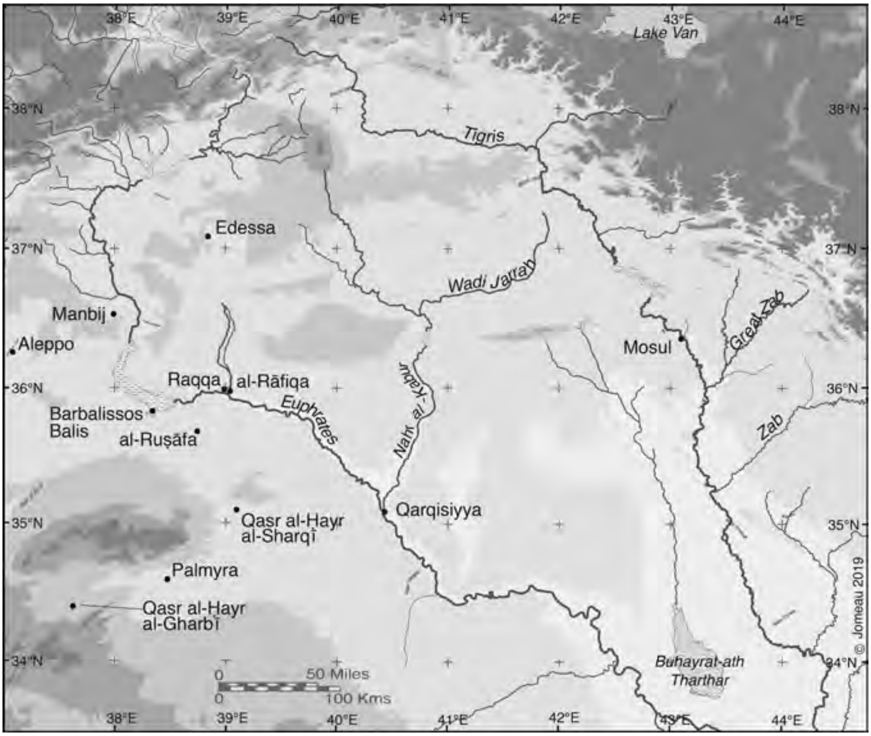
Maps



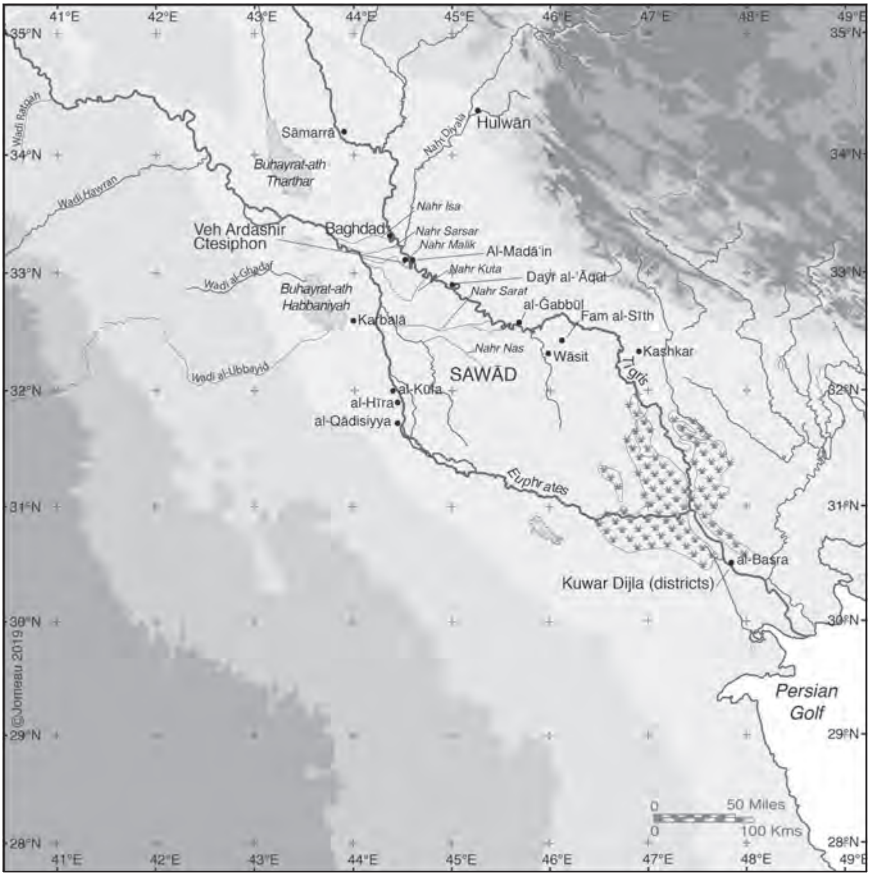
Map 1 Map of early Medieval southern Greater Syria (© D. Jomeau).



Map 2 Map of early Medieval northern Greater Syria (© D. Jomeau).



Map 3 Map of early Medieval Ğazīra (© D. Jomeau).



Map 4 Map of early Medieval Iraq (© D. Jomeau).

Introduction

Under the hegemony of the early Islamic caliphates—the Umayyads (661–750) and ʿAbbāsids (750–1258) —the Near East experienced remarkable prosperity, evolving into one of the wealthiest economies of Eurasia, which, perhaps equally remarkably, has yet to receive concerted scholarly attention.[1] This contrasted with the situation in western Europe, where the collapse of the Roman Empire led to political fragmentation, a breakdown of broader networks of exchange, and a related decline in the standard of living from the fifth to the ninth centuries.[2] This view is very much at odds with early-twentieth-century scholarship. Scholarly interest in the economy of the early medieval Near East developed from the 1930s onwards. During this period, Jean Sauvaget[3] argued that the Arab-Muslim conquests led to a shift from 'order to disorder', with the late antique city, its monumental architecture and organized layout, evolving into the Arab *madīna*. Disorganized marketplaces developed to the detriment of the well-organized classical models of the agora and forum. In another approach, Henri Pirenne[4] formulated the famous but controversial theory that the Muslim conquests instigated the break-up of the commercial and cultural unity of the Mediterranean. In this interpretation, the transition from antiquity to the Middle Ages in western Europe would not have been a slow process, but a rupture after the coming of Islam. Pirenne argued that this rupture led to a remarkable impoverishment of Roman cities and villages in the Levant, evidence for which was discovered

[1] LAVAN, L. (2012) 'From polis to emporion? Retail and Regulation in the Late Antique City', in C. Morrisson (ed.) *Trade and Markets in Byzantium* (Washington DC: Dumbarton Oaks Publications) 365–6.

[2] WARD-PERKINS, B. (2005) *The Fall of Rome and the End of Civilization* (Oxford: Oxford University Press) 88–120; HEATHER, P. (2000) 'State, Lordship and Community in the West (c. A.D. 400-600)', in *The Cambridge Ancient History: Late Antiquity, Empire and Successors* 14 (Cambridge: Cambridge University Press) 437–51.

[3] SAUVAGET, J. (1941) *Alep, essai sur le développement d'une grande ville syrienne* (Paris: P. Geuthner) 247.

[4] PIRENNE, H. [1937] (1992) *Mahomet et Charlemagne* (Paris: F. Alcan) 120–8.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020).
DOI: 10.1093/oso/9780198855828.001.0001

by the archaeologist Georges Tchalenko in the Limestone Massif of North Syria in the 1950s.[5]

After the Second World War, there was a reaction. The theory of an inevitable decline of the Near Eastern economy and cities after the Arab-Muslim conquests was first opposed by the publication of Maurice Lombard's *L'or musulman du VII^e au IX^e siècle* in 1947.[6] In contrast to Henri Pirenne, Lombard hypothesized that the Arab-Islamic conquests were a significant event in European history not because it created a rupture in the Mediterranean but because it introduced new economic stimuli. Lombard's model can be reduced to a system of mechanical causalities: in the fifth century, the Franks ran a trade deficit through their extensive purchasing of goods from the Levant, the Levantines ran a surplus for which a portion of this wealth was transferred, through trade, to Byzantium but also to the Persian and Indo-Chinese worlds. The impoverishment of western Europe caused by this trade imbalance led to a net movement of gold wealth from West to East. However, Lombard argued that in the seventh century the Muslim world managed to rebalance this disequilibrium by introducing a series of reforms that involved putting back into circulation the gold held by Christian churches and producing new coinage used for trade with Carolingian Europe. While Lombard emphasized the benefits of the coming of Islam for the wider Mediterranean world, Albert Hourani in *The Islamic City*[7] (1970) and later Hugh Kennedy in *From Polis to Madina* (1985) defended the idea of a slow evolution of the Near Eastern city from the sixth to the eighth century relying on endogenous causes such the expansion of Christianity,[8] the decline of civic institutions,[9] and the evolution of the fiscal system.[10] In parallel, excavations in the 1990s, in the villages of Dehes, Sergilla, and al-Bara in the Limestone Massif yielded evidence disproving Tchalenko's hypothesis and contradicting the tenets of Sauvaget and Pirenne's theses.[11]

[5] Inspired by Pirenne's thesis, Tchalenko demonstrated that the Persian wars of the seventh century and the Arab-Muslim conquests in the 630s and 640s led to the end of a prosperous rural life, whose economy was based on the production of olive oil for the Mediterranean market. TCHALENKO, G. (1953) *Villages antiques de la Syrie du Nord* (Paris: P. Geuthner) 1–3.

[6] LOMBARD, M. (1947) *L'Or Musulman au Moyen Age* (Paris: Annales ESC).

[7] HOURANI, A., STERN, S. (1970) *The Islamic City* (Oxford: Cassirer).

[8] WALMSLEY, A. (2000a) 'Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?', in I. L. Hansen, Ch. Wickham (eds.) *The Long Eighth Century, The Transformation of the Roman World* 11 (Leiden: Brill) 265–343.

[9] KENNEDY, H. (1985) 'From Polis to Madina: Urban Change in Late Antique and Early Islamic Syria', *Past and Present* 106: 3–27.

[10] HALDON, J. (2000) 'Production, Distribution and Demand in the Byzantine World, 660-840', in Hansen and Wickham (eds.) *The Long Eighth Century*, 229; WICKHAM, C. (2000) 'Overview: production, distribution and demand 2', in Hansen and Wickham (eds.) *The Long Eighth Century*, 345–77.

[11] The archaeologists Georges Tate and Gerard Charpentier established that the villages experienced a long prosperity from the fifth to the ninth centuries, as their local economy

Over the last two decades, scholarship has continued to challenge the preconceived myths of an early medieval decline in the Eastern world, highlighting the economic continuity between late antiquity and the early Middle Ages[12] as well as the increasing monetization of the economy. Much attention has also been paid to the evolution of late Roman and Sasanian road and fluvial networks and the ports, *ḫān*, or *ribāṭ* associated with them after the rise of Islam in greater Syria, Iraq, and Iran.[13] While most publications offered a regional perspective[14] or documented the history of one specific network from late antiquity to early Islam, such as the *Ḥaǧǧ* routes,[15] Adam Silverstein's volume on the postal systems, *barīd*,[16] in the pre-modern Islamic world has provided a wider picture of the way peoples travelled and cities were connected across the Near East from the Achaemenids to the Mongols.

Since the 1990s, agriculture has been one of the dominant themes of the historiography of the early Islamic economy because it is clearly related to the status of lands after the Islamic conquests and the evolution of the fiscal system. Pioneering research was conducted in 1957–8 by Robert McC. Adams[17] who looked at the evolution of settlement patterns and

combined oleoculture with the production of fruits, cereals, and wine for regional consumption. Olivier Callot, who investigated the wine and oil presses of the Limestone Massif, even argues that the transition from late antiquity to the rise of Islam saw a decline of basic presses attached to single households in favour of sophisticated workshops in luxurious residences from the early eighth century, which contradicts Pirenne's model of decline. TATE, G. (1992) *Les Campagnes de la Syrie du Nord du IIe au VIIe siècle: un exemple d'expansion démographique et économique à la fin de l'Antiquité* (Paris: P. Geuthner).

[12] WHITTOW, M. (2003) 'Decline and Fall? Studying Long-Term Change in the East', in L. Lavan, W. Bowden (eds.) *Theory and Practice in Late Antique Archaeology* (Leiden: Brill) 404–23; JOHNS, J. (1994) 'The Longue Durée: State and Settlement Strategies in Southern Transjordan Across the Islamic Centuries', in R. Rogan, T. Tell (eds.) *Village, Steppe and State: Social Origins of Jordan* (London: British Academic Press) 1–31; FOSS, C. (1997) 'Syria in transition. An Archaeological Approach', *DOP* 51: 189–269; FOOTE, R. (2000) 'Commerce, Industrial Expansion and Orthogonal Planning: Mutually Compatible Terms in Settlements of Bilad al-Sham During the Umayyad Period', *Mediterranean Archaeology* 13: 25–38; WALMSLEY, A. (2000a) 265–343.

[13] SILVERSTEIN, A. J. (2007) *Postal Systems in the Pre-Modern Islamic World* (Cambridge: Cambridge University Press).

[14] ROUGEULLE, A. (1998) 'Quelques notes sur les voies de communication en Irak médiéval', in R.-P. Gayraud (ed.) *Colloque International d'Archéologie Islamique* (Cairo: Ifao) 347–65 ; FIEY, J. M. (1964) 'The Iraqi Section of the Abbasid Road Mosoul-Nisibin', *Iraq* 26: 106–17 ; FINSTER, B. (1977) 'Die Reiseroute Kufa-Sa'ûdî Arabien in Frühislamischer Zeit', *Baghdader Mitteilungen* 9: 53–94; KING, G. R. D. (1987) 'The Distribution of Sites and Routes in the Jordanian and Syrian Deserts in the early Islamic Period', *Proceedings of the Seminar for Arabian Studies* 17: 91–105.

[15] AL-'AZZAWI, A. S. (1985–6) 'L'ancienne route du pèlerinage (Darb Zubayda)', *Sumer* 44 (1–2): 199–213; PETERSEN, A. (2012) *The Medieval and Ottoman Hajj Route in Jordan* (Oxford: Oxbow).

[16] SILVERSTEIN, A. J. (2007).

[17] McC. ADAMS, R. (1962) 'Agricultural and Urban Life in Early Southwestern Iran', *Science* 136: 109–22; (1965) *Land Behind Baghdad: A History of Settlement on the Diyala Plains* (Chicago: University of Chicago Press); (1974) 'Historical Patterns of Mesopotamian Irrigation

agricultural systems over a period of six millennia in the Diyala plains of Iraq. This field of study has in the last two decades increasingly benefited from the multiplication of surveys in Greater Syria,[18] Ǧazīra,[19] Iraq,[20] and Iran,[21] as well as of researches using old maps, aerial photographs and landscape archaeology techniques.[22] Historians and archaeologists have demonstrated a continuous agricultural dynamism[23] from the sixth to the ninth century in the Near East, except in Cilicia and Lycia in Anatolia, where the economy dramatically declined,[24] in the context of the Byzantine and Sasanian conflicts that forced the populations to flee the areas.

The transition between the death of Justinian in 565 and the end of the Umayyad caliphate in 750 has so far been central to the historiography of the early Islamic economy in the Near East, for which tracing the continuities with late antiquity has remained its main focus. By contrast, to move the discussion forward, this study explores the early medieval economy in the Near East from the early eighth to the tenth century. It replaces dynastic periodization with an original understanding based on economic development, which can progress without dependence on politics. It begins with the monetary reform of Caliph ʿAbd al-Malik around 700. The production of aniconic coins and the creation of a vast single market within a unified political space, without fiscal impediments to trade in the form of customs dues, favoured consumption and

Agriculture', in T. E. Downing, McG. Gibson (eds.) *Irrigation's Impact on Society* (Tuscon: University of Arizona Press) 1–6; (1981) *Heartland of Cities: Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates* (Chicago: University of Chicago Press).

[18] TATE, G. (1992); CLAUSS-BALTY, P. (2008) *Hauran III, L'habitat dans les campagnes de Syrie du Sud, aux époques classique et médiévale* coll. BAH (Damascus: Ifpo); TAXEL, I. (2013) 'Rural Settlement Processes in Central Palestine, ca. 640-800 CE: The Ramla-Yavneh Region as a Case Study', *BASOR* 369: 157–99.

[19] BARTL, K. (1996) 'Balīḫ Valley Survey. Settlements of the Late Roman/Early Byzantine and Islamic Period', in K. Bartl, S. R. Hauser (eds.) *Continuity and Change in Northern Mesopotamia from the Hellenistic to the Early Islamic Period* (Berlin: D. Reimer) 333–48.

[20] VERKINDEREN, P. (2015) *Waterways in Iraq and Iran in the Early Islamic period. Changing Rivers and Landscapes of the Mesopotamian Plain* (London: I.B. Tauris).

[21] SOROUSH, M. (2013) 'Irrigation in Khuzistan after the Sasanians: Continuity, Decline, or Transformation?', online paper; WILKINSON, T. (2000) 'Regional Approaches in Mesopotamian Archaeology', *Journal of Archaeological Research* 8: 219–67.

[22] Moreover, the development of archaeobotany and geoarchaeology has contributed massively to advance our understanding of the history of agriculture from late antiquity to the early caliphate. These new approaches, combined with the refinement of archaeological methods of dating, notably Optically Stimulated Luminescence (OSL), have helped to explain the formation of rivers and aid the study of the evolution of agricultural water systems.

[23] MORONY, M. (1994) 'Land Use and Settlement Patterns in Late Sasanian and Early Islamic Iraq', in G. R. O. King, A. Cameron (eds.) *The Byzantine and Early Islamic Near East II, Land Use and Settlement Patterns* (Princeton: Darwin Press) 221–9.

[24] WILKINSON, T. (1990) *Town and Country in Southeastern Anatolia* (Chicago: Oriental Institute) 117, 123, 126, 128.

investment.[25] This reform constituted a fertile ground for trade and production, up to the tenth century, when competing sultanates disputed ʿAbbāsid supremacy. The caliphate began then to suffer from a sharp economic decline from the rule of al-Qāhir in 932. The ʿAbbāsid Empire lost the revenue of Egypt, Ǧazīra in northern Iraq, and Iran, all of which became independent. In an attempt to maintain the cohesion of the caliphate and the allegiance of the army, the ʿAbbāsid rulers adopted the *ʿiqta* system,[26] in which state lands were allocated, as an income, to military and administrative officers. However, this policy reinforced territorial division of the Empire into privately administered areas that were not governed by central authority. In the context of the weakening of central authority, the economic prosperity of Ifrīqiya and Egypt under the Fatimids (909–1171) attracted many merchants, who left Baghdad to settle in North Africa.

This book, divided into four parts, explores the transformations undergone by craft and retail institutions in the Near East between 700 and 950, as well as their impacts on the individual, the community, and social hierarchy in the wider context of shifting power relations and changing economic dynamics. How did the changing sociopolitical, ideological, and economic dynamics after the rise of Islam affect retailing and crafts? What were the Roman, Sasanian, and late antique economic legacies kept in the eighth and ninth centuries? What was the influence of a conscious Islamification of daily life on the functioning of local exchange and production within Near Eastern cities? What can the specificities of craft and retail institutions between 700 and 950 tell us about changing labour patterns and social behaviours?

Part I examines the development of urban retail and craft in the highly favourable economic and demographic context of early Islam. It explores how and why patronage became an imperial *officium* from the early eighth century and the extent to which this evolution affected the status of craft and retail in the urban environment. While caliphal involvement in urban retailing is well attested in ninth- and tenth-century literary sources, I contend that rulers involved themselves already in this to establish their power and legitimacy from the first decades of the eighth century. Part II examines the nature and functioning of craft and retail spaces in the early medieval world and whether Arab-Muslim practices were radically innovative, or a readoption of phenomena that had disappeared in the fifth and sixth centuries, or a continuation of

[25] ILISH, L. (2010) ʻAbd al-Malik's Monetary Reform and the Failure of Centralisation', in J. Haldon (ed.) *Money, Power and Politics in Early Islamic Syria. Review of Current Debates* (Burlington: Ashgate) 125–47.

[26] KENNEDY, H. (2011) 'The Feeding of the Five Hundred Thousand: Cities and Agriculture in Early Islamic Mesopotamia', *Iraq* 73: 177–99.

past Roman and Sasanian norms.[27] Part III investigates the institutional and religious generators of trade and production in early Islam, while Part IV studies how this would, in turn, change the social status, labour patterns, and religious involvement of craftworkers and traders between 700 and 950.

This book offers unique insights into the formative period of Islamic society and the determinants of the economic success of the medieval Near East. In the background are questions to do with continuity and historical lineage, that is to say, whether the development of urban retailing, craft, and labour patterns under early Islam represented a continuation of Byzantine (and ultimately Roman) and Sasanian practices, a standardization of these, or a radical break from them. Although the Near Eastern material is central, comparisons in the paths of trade and economic life between the Near East and western Europe provide ways to identify the divergences between East and West after the fall of Rome. In this way, the path taken by the Near East after the rise of Islam can be set in a broader context. Additionally, this book marks an advance in expanding the debate by comparing and contrasting the Levantine and Iraqi evidence with original data from the eastern half of the Islamic caliphate, Iran and Central Asia. Did urban economic practices in the Levant, Iraq, Iran, and Transoxiana evolve towards a similar pattern, despite their different pre-Islamic heritage, or did they develop differently? Was the chronology of their transformation similar or substantially different according to their historical context?

Crossing the traditional boundaries that circumscribe fields, archaeological and written evidence are combined. Most of the Arabic written material dates from the late ninth century to the end of the ʿAbbāsid rule in 1258, which poses an important methodological issue for the study of early Islam. There is a significant time lag between the events they describe and the time they were recorded. Therefore, this work marks an advance in bringing together historical sources with contemporaneous material data. Archaeological sources, largely ignored by economic historians of the Near East,[28] are used to enrich, to add texture and life, as well as to provide quantitative data, to the simple narratives of early Islamic economy.

Physical traces include the remains of workshops and shops, from elementary to complex sites, excavated in the Near East, across the Levant and Iraq, as well as in Central Asia. Small artefacts, such as coins and tools from commercial and artisanal contexts, are also essential for a richly textured and nuanced interpretation of urban economy. This volume gathers drawings, axonometric

[27] McCORMICK, M. (2012) 'Movements and Markets in the First Millennium. Information, Containers, and Shipwrecks', in Morrisson (ed.) *Trade and Markets in Byzantium* (Washington DC: Dumbarton Oaks Publications) 51–98.

[28] SHATZMILLER, M. (1994) *Labour in the Medieval Islamic World* (Leiden: Brill); AL-DURI, A. (2011) *Early Islamic Institutions* (London: I.B. Tauris).

renderings, plans, cuts, sketches, and photographs of early Islamic shops and workshops from twenty-two archaeological sites in the Near East. Part of this iconographic material comes from widely available publications, but most of it was gathered from across Europe and the Near East with varying levels of difficulty. Many of the sites mentioned here were excavated between the 1930s and 1980s, at a time when the primary focus of archaeological research was the biblical and Roman heritage. In many instances, medieval remains from the first centuries of Islam were not considered important primary material and consequently were rarely photographed. They were hastily sketched before the excavation proceeded to more ancient occupational levels. More often than not, these discoveries were either not published or merely mentioned in reports.

The iconographic material collected includes representations for the most part unpublished until now. First and foremost, it comes from archaeological research in Jarash carried out personally and under the direction of A. Walmsley. Photographs of ancient digs, never published, were retrieved from archives in ʿAmmān, Damascus, and Jerusalem, at the Ifpo (French Institute of the Near East), as well as at the State Departments of Antiquities and Museums in Jarash and Palmyra, which are no longer accessible. I was also able to access some photographic archives and logbooks from ancient digs stored in several academic institutions, principally the Belgian Royal Academy of Brussels (Apamea archives). Lastly, several images or still unpublished plans were provided by archaeologists Oren Tal (Tiberias project), Danièle Foy (Beirut project), Pierre-Marie Blanc (South Syria project, Boṣra), Denis Genequand (Qaṣr al-Šarqī project), Olivier Callot (Dehes project), Gérard Charpentier (Sergilla project), Jacques Thiriot (Bālis project), Kristoffer Damgaard and Donald Whitcomb (Aqaba project). This material documents sites which have been damaged or destroyed because of warfare, agricultural and urban growth, or where archaeological studies are no longer possible owing to political or security difficulties. The purpose of including this visual material is not only to illustrate the points made in this book but also to provide additional data, through detailed legends, views presented from various perspectives—from close-ups to wide-angle—and aerial views that allow one to see remains in their urban context. It enables a more comprehensive representation of each of the sites, aiming to provide a foundation that can be used for future research.

In addition, epigraphic sources,[29] which provide significant information on trade and the identity, life, and rank of producers in early Islam, enable us to paint a more complex picture than that which can be derived from historical sources alone. They include shopkeepers' accounts, papyri, and craftworkers'

[29] GAUBE, H. (1982) 'Epigraphik', in W. Fischer (ed.) *Grundriss der arabischen philologie, Band 1: Sprachwissenschaft* (Wiesbaden) 210–25; HOYLAND, R. (1997) 'The Content and Context of Early Arabic Inscriptions', *JSAI* 21: 77–102.

signatures in Arabic and Aramaic produced in the Near East and Central Asia between 700 and 950. These signatures, listed in a database, often written in an informal style, were added to the finished objects, usually in inconspicuous places. These marks were not an indication of an elevation of status from artisan to artist but rather as a sign of pride in workmanship. They tell us about the conditions under which craftspeople laboured. These sources also provide information about women's and juveniles' involvement in the production; women and children rarely feature in narrative sources.

Literary evidence remains essential to exploring the changing status of economic patronage after the rise of Islam, the key issue of ownership, legal and administrative status of shops and workshops, as well as the relationship between merchants, craftsmen and –women, and the caliphal authority in the eighth, ninth and early tenth centuries. Non-Arab chronicles have the benefit of being contemporary to the eighth and ninth centuries, which is not always the case with Arab sources,[30] and some of them, such as the Byzantine-Arab chronicle of 741, the chronicle of Thomas of Marğa, pseudo Sebeos, Zuqnīn, and Michael the Syrian, include relevant accounts on urban economy in early Islam. The fourth part of the Syriac chronicle of Zuqnīn,[31] which evidence suggests may have been produced by a monk from the monastery of Zuqnīn near Amida, is one of the most detailed sources on the economic and fiscal history of Ğazīra in the second half of the eighth century. Beyond a simple narrative on the local ecclesiastical life, the chronicler also introduces polemical reports on the status of lands, the agricultural land-use, and the rapacious economic policy of the early ʿAbbāsids. He illustrates the increasing impoverishment of the Ğazīran peasantry in the context of the overtaxation of lands and emigration of peasants towards Mosul. In comparison, Mosul prospered from the eighth century with the development of cotton and wool industries,[32] and this generated a shift in the local elite with the empowerment of local merchants to the detriment of the landowning aristocracy. This document has been used in parallel with the history of Mosul of al-Azdī[33] (d. 945) and two brief Syriac chronicles written by local monks, the *Rīs Mellē* of Jean Bar

[30] GRIFFITH, S.-H. (1988) 'Jews and Muslims in Christian Syriac and Arabic Texts of the Ninth Century', *Jewish History* 3(1): 65–94; HOYLAND, R. (1997) *Seeing Islam as Others Saw It: A Survey and Evaluation of the Christian, Jewish and Zoroastrian writings on Islam* (Princeton: Darwin Press).

[31] CHABOT, J.-B. (1933) 'Chronique de Zuqnīn', *Scriptores Syri* 53 (Paris: J.-B. Chabot). HARRAK, A. (1999) *The Chronicle of Zuqnīn, Parts III and IV* (Toronto: Pontifical Institute of Mediaeval Studies).

[32] ISHAQ, Y.-M. (1992–3) 'The Significance of the Syriac Chronicle of Pseudo-Dionysius of Tell Mahre – A Political, Economical and Administrative Study of Upper Mesopotamia in the Umayyad and Abbasid Ages', *Orientalia Suecana* 41(2): 106–18.

[33] FORAND, P.-G. (1969) 'The Governors of Mosul According to al-Azdī's *Taʾrīḫ al-Mawṣil*', *JAOS* 89 (1): 88–105.

Penkāyē[34] (d. 700), a Chalcedonian monk of Penek, and the chronicle of Jacob of Edessa[35] (d. 708). Among Syriac chronicles, the account of Michael the Syrian has also been used. This chronicle derives its information from earlier chronicles, notably the lost chronicle of Dionysius of Tell Mahré and the anonymous Chronicle of 846,[36] and provides a broad overview of the history of the Near East from antiquity to the twelfth century, bringing to the historian essential data shedding light on the evolution of urban economy.

Literary testimonies also include a large corpus of Arabic sources, notably local chronicles from the ninth to the eleventh centuries. Urban histories include those of Wāsiṭ by Ibn Baḥšal[37] (d. 905), Buẖāra by al-Naršaẖī (d. 959), Mosul by Abū Zakariyyā' al-Azdī (d. 945), and Isfahan by Ḥamza al-Iṣfahānī (d. 961). In conjunction with this are the introductory chapters of the *Ta'rīẖ Baġdād* by al-Ḫaṭīb al-Baġdādī (d. 1085), that offer a detailed description of the historical topography of Baghdad from information collected in the ninth century by the linguist Ibn Abī Ṭāhir Ṭayfūr. The book by Ḥamza al-Iṣfahānī on Isfahan is lost, but pieces have survived in the thirteenth-century geographical encyclopedia *Mu'ǧam al-buldān* of Yāqūt. This corpus includes the chapter on the topography of cities and geography of Fārs written by 'Iṣṭaẖrī in the tenth century, which was transmitted by his contemporary Ibn Ḥawqal. Also falling into this orbit are the chapters of al-Ya'qūbī on Baghdad and Sāmarrā, which are not merely descriptions of the geographical features, but also integrate historical commentaries. Urban chronicles provide evidence on the foundation of new settlements after the rise of Islam as well as the Islamization of late antique urban centres. They elucidate the characteristics of urban topography and the increasing prominence of trade and production in Near Eastern cities from the early eighth century. The evolving processes of integration into the urban framework of marketplaces and workshops, their division into specialized sectors, their operational relationships with mosques and progressive ghettoization beyond the fortifications from the reign of 'Abbāsid caliph al-Manṣūr in the late eighth century are central themes covered by urban chronicles. Relevant comparisons can be drawn between the chronicles and the archaeological evidence to challenge the classical model of a transition from urban order to disorder after the Islamic Conquest. Urban chronicles additionally reveal key points about the administration of urban economy, in particular the public–private status of shops and workshops, the issue of the hereditary transmission of economic property, as well as questions relating to taxation and rent.

[34] SCHER, A. (1907) 'Notice sur la vie et les oeuvres de Yohannan Bar Penkayè', *JA* ser. 10: 161–78; BROCK, P. (1987) 'Book XV of John Bar Penkāyē', *JSAI* 9: 51–75.

[35] HOYLAND R. (1997).

[36] BROOKS, E.-W. (1897) 'A Syriac Chronicle of the Year 846', in *Zeitschrift der Deutschen Morgenländischen Gesellschaft* (Leipzig: E. Windisch) 569–417.

[37] IBN BAḤŠAL (1967) *Ta'rīẖ Wāsiṭ* (Bagdad: Guirguis 'Awwād).

The voluminous histories of al-Ṭabarī (d. 923) and the *Ansāb al-ašrāf* of al-Balāḏurī (d. 892) remain fundamental to our understanding of the Near Eastern history of the eighth and ninth centuries. The regional chronicle of Abū al-Faṯ al-Sāmirī al-Danafī provides an additional interesting perspective on the political, economic, and fiscal history of Palestine up to the reign of ʿAbbāsid caliph al-Rādī (d. 934). Although the chronicler does not mention his sources, chronologies of natural events (earthquakes, floods, famine, and drought) are meticulously recorded and lead us to suppose that the author relied on contemporary sources.

Evidence has also been gleaned from treatises of political and fiscal theory, which illuminate the institutional foundation of urban economic changes in the eighth and ninth centuries. This includes manuals of *ḥisba* (works of Islamic law) written in the ninth to eleventh centuries by Zaydī and Māwardī, epistles, and fiscal treatises, such as the *Kitāb al-Ḫarāǧ* of the Qāḍi Abū Yūsuf[38] (d. 798), written by administrative secretaries in the early ʿAbbāsid rule. Among the epistles, the *Risāla* of Secretary Ibn al-Muqaffaʿ (d. 757) is a detailed memorandum addressed to Caliph al-Manṣūr (d. 775). It constitutes a detailed testimony on the early ʿAbbāsid Empire, the status of its army, economy, and taxation system.

The ninth- and tenth-century Arab geographers—al-Hamaḏānī[39] (d. 903), al-Yaʿqūbī[40] (d. 905), Ibn Ḫurradāḏbih[41] (d. 911), al-Muqaddasī[42] (d. 946), and Ibn Ḥawqal[43] (d. 977)—in their *Kitāb al-buldān*(s) expound random tales of their voyages illuminating life in Near Eastern cities and their hinterland, as well as local trade and production across the *dār al-Islām* in the context of the rise of Baghdad as the core capital of an increasingly globalized exchange system. Their accounts provide valuable quantitative and descriptive details of shops and workshops city by city. In addition, the revenues collected as taxation or rent from these facilities and their redistribution are also recorded—for instance, between the Daylem and the Ḫurāsān the revenue of the urban marketplaces was used for the maintenance of the *ribāṭ*(s).[44]

In parallel to the treatises of descriptive geography, the eighth- and ninth-century books of medicine, largely ignored by economic historians, gathered additional and relevant information on organic and inorganic resources used in the production of pharmaceutical drugs and urban industries operating in the early Islamic Near East. Outlining the local, regional, or foreign origin of these resources, medical treatises shed light on the evolution of trading

[38] BEN SHEMESH, A. (1969) *Taxation in Islam* (Leiden: Brill).
[39] IBN AL-FAQĪH AL-HAMAḎĀNĪ (1885) *Kitāb al-buldān* (Leiden: De Goeje).
[40] AL-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje).
[41] IBN ḪURRADĀḎBIH (1967) *Kitāb al-masālik wa al-mamālik* (Leiden: Brill).
[42] AL-MUQADDASĪ (1877) *Aḥsan al-taqāsīm fī maʿrifat al-aqālīm* (Leiden: De Goeje).
[43] IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: Brill).
[44] AL-MUQADDASĪ (1877) 356.

patterns and the contribution of agriculture and exchange in the early Islamic economy. Among these treatises are those of Masīḥ al-Dimašqī (d. 809),[45] Yuhanna b. Māsawayh (d. 857),[46] Qusṭā b. Lūqā (d. 912),[47] Sahlān b. Kaysān (d. 990),[48] and Ibn Buṭlān (d. 1066).[49] This book also makes use of the medical treatises of the Egyptian physician Ibn Baytar (d. 1248). Although this is a later source, his work remains nevertheless useful as the author relies on earlier material from Galen, Aristotle, and Dioscorides to Yuhanna b. Māsawayh (d. 857), ʿAlī al-Ṭabarī (d. 861), Hunayn b. Isḥāq (d. 873), and Abū Hanīfa al-Dīnawarī.

Lastly, as part of the textual material, the *ʿuyūn al-aẖbār* are a fundamental source to examine the evolving status of merchants and craftspeople. These books compile anecdotal narratives about the everyday life of the general populace and the elites in the Near Eastern cities of the caliphate, illuminating the rise of trading classes. Among them are the books of al-Ǧāḥiẓ, *Kitāb al-buẖalāʾ* (the *Book of Misers*)[50] and *Kitāb al-biġāl*,[51] as well as the *Kitāb*(s) of al-Tanūẖī and Dīnawarī on Baghdad, the *Kitāb al-išāra* of Ibn ʿAlī al-Dimašqī,[52] and the *Kitāb al-Kasb* of al-Shaybānī.[53]

Combining archaeological and literary material, this monograph engages with the social and economic history of the early medieval Near East and moves beyond the simple description of retail and production in early Islam to provide an original analysis of urban economic and social transformations precipitated by new power dynamics from 700 to 950.

[45] AL-DIMAŠQĪ (2002) *Risāla al-Hārūniyya*, trans. S. Gigandet (Damascus: Ifead).

[46] AL-MĀSAWAYH (1936–37) ʻKitāb Ǧawāhir al-tīb al-mufradaʼ, *BIE* 19: 5–27; (1933) ʻKitāb al-āzminaʼ, *BIE* 15: 235–57; (1977) *Al-Ǧawāhir wa ṣifātihā* (Cairo: I. Abdul Salam Rauf).

[47] QUSṬĀ B. LŪQĀ (1992) *The Risāla fī Tadbīr Safar al-Hajj*, trans. G. Bos (Leiden: Brill).

[48] IBN KAYSĀN, (1953) ʻPrécis sur les médicaments composés, employés dans la plupart des maladiesʼ, in *Deux traités médicaux*, trans. P. Sbath, Ch. D. Avierinos (Cairo: Ifao) 2–75.

[49] IBN BUṬLĀN (1990) *Taqwīm al-Ṣiḥḥa* (Leuven: Peeters).

[50] AL-ǦĀḤIẒ (1951) *Kitāb al-buẖalāʾ*, trans. Ch. Pellat (Paris: G. P. Maisonneuve).

[51] AL-ǦĀḤIẒ (1964) ʻKitāb al-biġālʼ, in *Rasāʾil al-Ǧāḥiẓ* 2 (Cairo: A. Hārūn).

[52] IBN ʻAlĪ AL-DIMAŠQĪ (1900) *Kitāb al-išāra* (Beirut: Maṭbaʻat al-Muʼayyid).

[53] BONNER, M. (2001) ʻThe *Kitāb al-Kasb* attributed to al-Shaybānī: poverty, surplus, and the circulation of wealthʼ, *JAOS* 121 (3): 411.

1

The Historical Context

The seventh to the eighth centuries witnessed the initially rapid Arab-Muslim conquests of the Near East and their subsequent slow expansion in North Africa, Spain, and Central Asia, leading to the rise of a unified Islamic caliphate from 661 to the early tenth century. Chapter 1 seeks to define the material and sociopolitical context of this key period in the history of the Near East, which determined the development of urban economic life: while differing conditions of conquests in the Near East and Central Asia, respectively peaceful subjugation and brutal expansion, laid the foundation of region-specific economic practices, the assertion of caliphal authority as well as the development of agriculture and trade sowed the seeds of economic growth.

1. CONQUESTS

The Arab-Muslim conquests are documented in various, sometimes opposed, texts. Contemporary accounts written by Christians, who were directly affected, often provided highly emotional testimonies, while later Arabic literature, shaped in the light of their own world, performed the role of propaganda offering idealized and homogeneous narratives. Disagreement between literary sources necessitates the use of archaeological material for a nuanced and less subjective appraisal of this world-changing phenomenon.

The conquests of Syria and Iraq are reported in a highly distilled narrative. While contemporary Chalcedonian priests, such as the Patriarch Sophronius of Jerusalem, describe the horrors in Palestine that the conquests instigated, and later Byzantine historians, such as Theophanes the Confessor, portray the conquests as having led to 'the desolation of Syria', most literary accounts reveal that resistance was minimal in Roman Syria[1] and a little bit more active

[1] James Howard-Johnston's book, *Witnesses to a World Crisis*, on the historical sources of the seventh century, presents a rather different view; and in any case such a statement needs to acknowledge that 'a smooth transition' was definitely not what happened in North Africa, and

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020). © Fanny Bessard.
DOI: 10.1093/oso/9780198855828.001.0001

in Iraq, although very much concentrated in Ctesiphon. The conquests were aided by the Arab tribes formally controlled by the Ghassanids and Lakhmids—Arab tribes involved in the defence of the Roman and Persian frontiers in the late sixth century—as well as by the resurgence of religious conflicts in the late Roman Near East.[2] Islam's advocacy of tolerance of People of the Book[3] was immensely appealing to minorities continuously persecuted by Byzantine imperial authorities, and resulted in many cities in the Levant simply surrendering to the Arabs.

The Romans in Syria had the experience of the Persian occupation and probably did not expect that the conquests would last. The cities of Antioch, Aleppo, and Qinnasrīn, for instance, fell in 637 without any resistance.[4] Their surrender does not necessarily indicate that the local populations welcomed Arab domination immediately, but as Hoyland notes it was rather a recognition that no help was coming, the Byzantines being no longer able to fulfil a defensive role.[5] In the city of Ludd in Palestine, the inhabitants were offered freedom of worship and safety of their 'churches and crosses'.[6] Caliph 'Umar b. al-Ḫaṭṭāb (634–44) did not intend to enforce drastic change on the living patterns of local populations and, as Fred Donner[7] has commented, the Arabs invaded the Levant and Iraq without the intention of forcefully imposing a new faith on the natives.[8]

Walter Kaegi, discussing the effects of the Arab conquests on Levantine cities, argues that they did not lead to immediate permanent physical defacement of cities and lands, even in Caesarea in Palestine where the town resisted.[9] Archaeological evidence confirms that the cities of the Decapolis experienced a long-lasting prosperity from the late sixth century to the end of Umayyad rule in 750.[10] For instance, Boṣra retained its Roman character, colonnaded streets, existing commercial places, and religious buildings.

that the same period saw the end of the monumental classical city in Asia Minor (for reasons still debated). Aphrodisias, for instance, ceased to be a monumental city in the early seventh century.

[2] FOSS, C. (2003) 'The Persians in the Roman Near East', *Journal of the Royal Asiatic Society* 13(2): 149–70.

[3] Qur'an al-Baqarah 2: 256, Oxford World Classics edition.

[4] AL-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 144, 146–7.

[5] HOYLAND, R. (1997) *Seeing Islam as Others Saw It: A Survey and Evaluation of the Christian, Jewish and Zoroastrian writings on Islam* (Princeton: Darwin Press) 23–4.

[6] AL-ṬABARĪ (1964) *Ta'rīḫ al-rusul wa al-mulūk*, Prima Series 5 (Leiden: De Goeje) 2405–7.

[7] DONNER, F. M. (2010a) *Muḥammad and the Believers: At the Origins of Islam* (Cambridge MA: Belknap Press of Harvard University Press) 109.

[8] PETERSEN, A. (2005) *The Towns of Palestine Under Muslim Rule, AD 600–1600* (Oxford: Archaeopress) 25.

[9] KAEGI, W. (1992) *Byzantium and the Early Islamic Conquests* (Cambridge: Cambridge University Press) 270.

[10] WALMSLEY, A. (2007a) 'Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800', *DOP* 61: 336; PICCIRILLO, M. (1993) *The Mosaics of Jordan* ('Ammān: American Centre of Oriental Research).

New houses were built aligned with pre-existing Roman ones. The mosque called the mosque of ʿUmar, built using recycled material from pagan temples, carefully integrated the existing fabric. A similar situation is perceptible in cities such as Jarash, where the Roman fabric was preserved and a mosque developed at the intersection of the north–south and east–west streets, without the destruction of neighbouring monuments, such as the Roman indoor market or *macellum*. This was a deliberate ploy designed to gain the support of the local population.

There is also no indication that existing churches experienced significant damage as a result of the conquests. The treaty formulated between the Arabs and local bishops granted the local population legal rights in exchange for the payment of a tax or *jizya*. The process of building or refurbishing churches continued uninterrupted, as is illustrated by the discovery of several Greek inscriptions pertaining to the reconstruction of Umm al-Jimal, Rihāb, Khirbat al-Samra, and Umm al-Rasas between 639 and 785.[11] Monastic foundations in central Palestine and Transjordan remained active between 600 and 800. During the excavation of the site of Nabī Mūsā in Egypt, a fragment of early medieval jar handle has been discovered stamped with the seal 'Dayr Samwīl' in Arabic (Monastery of Samuel), testament to the expanding use of Arabic in the nascent caliphate and the late antique monastery's continuous involvement in regional trade. Overall, the arrival of the Muslims in the Levant in the late 630s was so imperceptible that these campaigns have been described by Peter Pentz as the 'Invisible Conquests' that led to a process of 'change in the continuity'.[12]

The conquest of Iraq was equally efficient, although the Arab-Muslim armies encountered resistance around Kūfa, during the so-called Battle of the Bridge in 634, as well as in Ctesiphon. The Sasanian Empire was considerably weakened after the Byzantine–Persian wars and the dynastic crisis of 628–32. Following the decisive Battle of al-Qādisiyya in 637, during which the Persians experienced a dramatic defeat, the Sawād was rapidly taken over by the Arab-Muslims, with the support of the local Arab tribe Banū Shaybān. Subsequently, the Muslims besieged the Sasanian capital Ctesiphon, originally encountering some short-lived resistance and later little opposition after the city was evacuated. As a result of these campaigns, the whole of the rich Iraqi alluvium, including Khuzistan, passed under the Muslims' control between 635 and 642. From 641 to 642, the Arabs dispatched military forces towards the north (Ǧazīra and Armenia) as well as east (Iran).

[11] GATIER, P.-L. (2011) 'Inscriptions grecques, mosaïques et églises des débuts de l'époque islamique au Proche-Orient (VIIe-VIIIe siècles', in A. Borrut, M. Debié, A. Papaconstantinou, D. Pieri, J.-P. Sodini (eds.) *Le Proche-Orient de Justinien aux Abbassides. Peuplement et dynamiques spatiales* (Turnhout: Brepols) 7–28.

[12] PENTZ, P. (1992) *The Invisible Conquest: The Ontogenesis of Sixth- and Seventh-Century Syria* (Copenhagen: National Museum of Denmark).

While Syria and Iraq were subjugated with ease, the conquests of Iran and Central Asia in the second half of the seventh and early eighth centuries were more gradual. The environmental restrictions, in particular the Iranian and Central Asian high plateaux and mountains, as well as the united front posed by the locals, meant that the fighting could be extremely fierce and several cities were sacked. The Arab-Muslim expansion in Iran and Central Asia revealed profound differences. The conquests were now pre-planned and launched mostly to raise revenues[13] in the form of booty.[14] The literature on the conquest of Iran includes conflicting accounts, possibly reflecting its actual disorder and the several rebellions and reconquests of Bishapur, Istakhr, Gūr (Firuzabad), and Fasa, where the Arabs met local resistance.[15] In 651, Sasanian king Yazdgard was killed and most of the Iranian plateau fell under the control of the Arab-Muslims.

From 704 to 722, the Islamic expansion in Central Asia between the Oxus (Amu Darya) and Syr Darya (Jaxartes) rivers was even more hesitant, long-lasting, and extremely destructive, as the Muslims faced strong resistance. This explains the relatively late Islamization and Arabization of the region.[16] Archaeological and historical evidence reveals, for instance, that the Arab raids launched by Qutaybah in the oasis of Buẖāra,[17] Samarkand,[18] and the province of Ḫwārazm in the period 708 to 713 were hugely destructive.[19]

[13] Conquests were also launched to seize slaves, which occurred after many raids in North Africa at the end of the Umayyad Caliphate. DONNER, F.M. (1999) 'Muḥammad and the Caliphate. Political History of the Muslim Empire, up to the Mongol Conquest', in J. L. Esposito (ed.) *The Oxford History of Islam* (Oxford: Oxford University Press) 20–2.

[14] AL-ṬABARĪ (1964) *Ta'rīẖ al-rusul wa al-mulūk*, Secunda Series (Leiden: De Goeje) 1188.

[15] MORONY, M. (2012) 'Iran in the Early Islamic Period', in T. Daryaee (ed.) *The Oxford Handbook of Iranian History* (Oxford: Oxford University Press) 214.

[16] FRYE, R. N. (1975) *The Golden Age of Persia* (New York: Barnes and Nobles) 99–100. The spread of the Arabic language in the administration in the Levant was undoubtedly a dynamic and long-lasting impact of the Muslim conquests. By contrast, the penetration of Muslims in Central Asia did not result in a similar process. Arabic was not introduced to the region before the governorship of Naṣr b. Sayyār in 742. It eventually became the language of government, although Persian continued to be spoken and held a great importance even after the Muslim occupation.

[17] AL-NARŠAḪĪ (2007) *The History of Bukhara*, trans. R. N. Frye (Princeton: Markus Wiener) 44–55.

[18] AL-ṬABARĪ (1964) *Ta'rīẖ al-rusul wa al-mulūk*, Secunda Series 2 (Leiden: De Goeje) 1241–53.

[19] On Samarkand and the results of a hundred years of excavation, see SIMEON, P. (2009) 'Les ateliers de potiers en Asie Centrale, entre Samarqand et Nīshāpūr: approche critique de la conquête musulmane au XIIe siècle', *Actes du colloque AIECM2* (Università Ca' Foscari: Venezia) 15–21. Although the citadel survived the conquests, an entire domestic quarter in the Shahrestan was destroyed. In the second half of the eighth century, a palace was built probably for Naṣr b. Sayyār as well as a mosque on the ruins of the Shahrestan, according to material and textual evidence. About the building of a new palace during the late Umayyads, see KAREV, Y. (2015) *Samarquand et le Sughd à l'époque 'Abbāsside. Histoire politique et sociale* (Paris: Studia Iranica Cahier) 90, 122; (2000) 'Un palais islamique du VIIIe siècle à Samarkand', *Studia Iranica* 29(2): 273–96; and GRENET, F. (2008) 'Le palais de Naṣr b. Sayyār à Samarkand (année 740)', in

The ninth-century chronicler al-Ṭabarī provides a detailed description of the capture of Samarkand after a bloody war between the Muslim army and a coalition formed by Sogdians and horsemen from Šāš and Farġāna. The fighting was extremely fierce and Samarkand was sacked. The sculptures were stripped of their silver, gold, and silk adornments and burned. The old fire-temples were destroyed as well as their idols. The defeated local non-Muslims had to pay a tribute in recognition of Islamic sovereignty.

The city of Panjikent, which was besieged by the Arabs in 722,[20] was also sacked, and then left abandoned for around fifteen years, until 740 when reconstruction projects were finally commenced. The peace established between the Umayyad governor of Ḫurāsān, Naṣr b. Sayyār (738–48), and the Sogdians fostered the rebirth of the town, enabling the rebuilding of houses, ceremonial halls, and palace. Yet, in the context of a large emigration of the landowning elite, the remaining local nobility was not able to easily assemble the finances for such reconstruction.[21] As Panjikent was somewhat isolated from the leading trading routes, its reconstruction also constituted less of a priority for the Muslim government. From 760 to 770, despite various efforts, many residences housing the former aristocracy were left abandoned and were occupied by the populace.[22] Hence, the conquest of Sogdia in Central Asia often led to the decline of the previous structures.

The differing conditions of conquest explain the regional specificities of urban and economic development in early Islam observed in Greater Syria, Iraq, and Central Asia. While cities, ports, and villages in the Near East enjoyed an age of redevelopment and transformation as early as the late seventh century,[23] many Persian, and in particular Central Asian, settlements

E. De La Vaissière (ed.) *Islamisation de l'Asie centrale. Processus locaux d'acculturation du VIIe au XIe siècle* (Paris) 11–28.

[20] The conquest of Panjikent immediately followed the capture of its last ruler Dēwāshtīch on Mount Mugh known from the chronicle of al-Ṭabarī. AL-ṬABARĪ (1964) Secunda Series (Leiden: De Goeje) 1447. The excavation of the site began in 1947 and is still under way. GRENET, F., DE LA VAISSIERE, E. (2002) 'The Last Days of Panjikent', *Silk Road Art and Archaeology* 8 (Kamakura: Journal of the Institute of Silk Road Studies) 157–96; STARR, S. F. (2013) *Lost Enlightenment: Central Asia's Golden Age from the Arab Conquest to Tamerlane* (Princeton: Princeton University Press) 115; KAREV, Y. (2015) 90; RASPOPOVA, V. A. (1990) *Zhilishcha Pendzhikenta* (Leningrad) 173.

[21] DE LA VAISSIERE, E. (2005) *Sogdian Traders* (Leiden: Brill) 273.

[22] DE LA VAISSIERE, E. (2005) 272.

[23] BACHARACH, J. (1996) 'Marwanid Umayyad Building Activities: Speculations on Patronage', *Muqarnas* 13: 27–44; see also on the foundation of 'Anjar, Ramla, and Ayla, HILLENBRAND, R. (1999) 'Anjar and Early Islamic urbanism', in G. P. Brogiolo, B. Ward-Perkins (eds.) *The Idea and Ideal of the Town between Late Antiquity and the Early Middle Ages* (Leiden: Brill) 59–98; LUZ, N. (1997) 'The Construction of an Islamic City in Palestine: the Case of Umayyad al-Ramla', *JRAS* 37: 27–54; PETERSEN, A. (2005) 92–102; NORTHEDGE, A. (1994) 'Archaeology and New Urban Settlement in Early Islamic Syria and Iraq', in G. R. O. King, A. Cameron (eds.) *The Byzantine and Early Islamic Near East* (Princeton: Darwin Press) 251–9. GENEQUAND, D. (2006) 'Umayyad Castles. The Shift From Late Antique

remained extensively destroyed up to the early ninth century, when the surviving core of Paykand, Panjikent, Samarkand, and Termez[24] began to grow again in the context of the empowerment of the local dynasty of the Sāmānids.[25] The recovery of local settlements in Sogdia was slower because the region suffered considerable destruction. The conditions of conquest shed light on the contrasting nature of economic and urban development in the Islamic world. Roman and Sasanian heritage was appropriated and Islamized in the Levant and Iraq, representing both a continuity with and modification of the past. This contrasted with Central Asian cities. Because of the extent of their destruction, radical reconstructions occurred in the late eighth and ninth centuries with little or no reliance on historical legacy.

2. IDEOLOGY

After the Arab-Muslim conquests, the Islamic caliphate came under the leadership of the successive dynasties of the Umayyads (661–750) and ʿAbbāsids (750–1258). While the reign of the Umayyads was marked by a strong persistence of pre-Islamic Byzantine and Persian Sasanian practices, the court at Damascus retaining its large complement of Christian civil servants, the rule of the late Marwānids and the ʿAbbāsids witnessed the development of an imperial ideology by the rulers of these conquered lands. The religious and secular Christian and Zoroastrian elite saw its role in political affairs declining in the medieval Near East, within the context of the rise of a Muslim aristocracy and the assertion of its authority.

In the early eighth century, during the Umayyad caliphate, the Muslims still formed a small part of the populace. Islam was regarded as principally an Arab religion, and the authorities, who realized that this would deprive them of much-needed tax revenue, did not encourage conversion. The mentions of peasants, to whom provincial governors refused conversion, are frequent in historical sources. The governorate of al-Ḥağğāğ b. Yūsuf in Iraq is well known for having pursued this policy in particular. Al-Ṭabarī reports that non-Muslim Iraqi peasants, ʻalthough they converted to Islam in Iraq, were generally sent back to their villages and lands, where they were made

Military Architecture to Early Islamic Palatial Building', in H. Kennedy (ed.) *Muslim Military Architecture in Greater Syria* (Leiden: Brill) 3–25; (2005) 'From Desert Castle to Medieval Town: Qasr al-Hayr al-Sharqi (Syria)', *Antiquity* 79: 350–61; (2012) *Les établissements des élites omeyyades en Palmyrène et au Proche-Orient* (Beirut: Ifpo).

[24] TOR, D. G. (2009) 'The Islamization of Central Asia in the Sāmānid era and the reshaping of the Muslim world', *BSOAS* 72/2: 279–99.

[25] KENNEDY, H. (2006) 'From Shahristan to Medina', *Studia Islamica* 102 (3): 5–34.

to pay the poll tax, just as they had been prior to their conversion'.[26] This progressively changed in the course of the eighth and ninth centuries. In 1979, Richard Bulliet produced the first comprehensive study of the history of the conversion to Islam up to 1000. Although his methodology was heavily criticized due to the lack of data, and further because his study was relevant to an urban society, his view was adopted with the exception of Egypt. He states that while 10 per cent of the conversion process was completed when the ʿAbbāsids came to power in 750,[27] this figure rose to around 80 per cent between the late ninth and tenth centuries in Iraq, Iran, and Syria. In Spain and Tunisia, the conversion was achieved later,[28] because of the later date of conquest. In Central Asia also, Islam took longer to establish, and mountain communities developed their own Islamic folk rituals that mixed old traditions with Muslim beliefs and practices. The eighth and ninth centuries witnessed a diversification of the social fabric in the Near East, with the penetration of non-Arab Muslims into the court and the administration of the government.

The fracture of the social fabric deepened even further at that time with the formation of Shiʿism, and Shīʿī sects who challenged the authority and legitimacy of the Umayyad and early ʿAbbāsid caliphs. The emergence of Shiʿism, as a political movement, manifested itself in a series of rebellions mainly in Iraq, which divided the community of believers, and led to significant uprisings such as that mounted by the ʿAlīd leader Zayd b. ʿAlī in Kūfa in 740. Already in the first half of the eighth century, the late Umayyads made significant efforts to legitimize themselves in the eyes of their Muslim subjects and particularly the ʿAlīds, Zubayrīds, and *ḫawāriǧ*. To do so, the Umayyads linked their practices with those of the Prophet Muḥammad and the Qur'ān. Caliphs Hishām (724–43) and Marwān II (744–50) constructed a series of theocratic arguments to legitimize their authority.[29] These arguments are preserved in the writings of the late Umayyad administrator ʿAbd al-Ḥamīd b. Yaḥyā, and formed a

[26] AL-ṬABARĪ (1964) Secunda Series 3 (Leiden: De Goeje) 1435; MARIN-GUZMAN, R. (1994) 'The ʿAbbasid Revolution in Central Asia and Khurasan: an analytical study of the role of taxation, conversion and religious groups in its genesis', *Islamic Studies* 33/2–3 (special issue): 227–52.

[27] BULLIET, R. (1979) *Conversion to Islam in the Medieval Period: An Essay in Quantitative History* (Cambridge MA: Harvard University Press) 44–6; MORONY, M. (1990) 'The Age of Conversions: A Reassessment', in M. Gervers and R. J. Bikhazi (eds.) *Conversion and Continuity. Indigenous Christian Communities in Islamic Lands* (Toronto: Pontifical Institute of Mediaeval Studies) 135–50.

[28] BRETT, M. (1973) 'The Spread of Islam in Egypt and North Africa', in M. Brett (ed.) *Northern Africa: Islam and Modernization* (London: Cass) 1–12; LAPIDUS, I. (1972) 'The Conversion of Egypt to Islam', *Israel Oriental Studies* 2: 248–62.

[29] To know more about Umayyad caliphs and religious authority in the first centuries of Islam, see CRONE, P., HINDS, M. (1986) *God's Caliph* (Cambridge: Cambridge University Press).

substantial legacy bequeathed by the Umayyads to subsequent generations.[30] They were taken up and used by the early ʿAbbāsids.[31]

Overall, the eighth and ninth centuries were a period of political gestation, when the notion of leadership and the role of the caliph were defined, in the context of a complex transformation of the social and religious environment.[32] This called for the development of a unifying ideology to bind the non-Muslims, the Muslim Arab community, and the *mawālī* into the regime. While Chapters 2–3 explore the connection between politics and urban economy, Chapters 4–7 examine the way in which the nature of retailing and crafts in early Islam represented a reappropriation of late antique legacies or a break from the past, in the context of the Islamification of society.

3. AGRICULTURE

The slowing of Arab-Muslim military expansion from 715 to 750 triggered the evolution of cities and agricultural estates as documented by archaeology and literary sources. During this period of syncretism, Arab Muslims began to constitute a new provincial city-based aristocracy, adopting practices inspired by the secular nobility in Greater Syria and Iraq, such as the acquisition and development of large estates known as *qaṭīʿa*, reusing Roman irrigation technologies.[33] The half-brother of Caliph al-Walīd b. ʿAbd al-Malik (705–15), Maslamah, who was governor of Ǧazīra in 708–9 and controlled, according to the Chronicle of Theophanes (d. 818),[34] the territory of the frontier from Anṭākiya to the Balīẖ, settled in late Roman Bālis and had a palace, ʻḤiṣn Maslamah', built along the Middle Euphrates Valley in the early eighth century. Archaeologists have identified Ḥiṣn Maslama with the ruined site of Madīnat al-Fār, where the excavation of early-eighth-century coins and

[30] AL-QĀḌĪ, W. (1994) 'The Religious Foundation of Late Umayyad Ideology and Practice', in *Saaber Religioso y Poder Politico en el Islam. Actas del Simposio Internacional Granada 1991* (Madrid) 231–73.

[31] DONNER, F. M. (2010b) 'Umayyad Efforts at Legitimation: The Silent Heritage of the Umayyads', in A. Borrut, P. M. Cobb (eds.), *Héritages Omeyyades/Umayyad Legacies* (Leiden: Brill) 202–3.

[32] DONNER, F. M. (1999) 22–3.

[33] WICKHAM, C. (2005) 241; KENNEDY, H. (2011) 'Great Estates and Elite Lifestyles in the Fertile Crescent from Byzantium and Sasanian Iran to Islam', in A. Fuess, J.-P. Hartung (eds.) *Court Cultures in the Muslim World: Seventh to Nineteenth Centuries*, (London: Routledge) 54–79; (2014) 'Landholding and Law in the Early Islamic State', in J. Hudson, A. Rodriguez (eds.) *Diverging Paths? The Shapes of Power and Institutions in Medieval Christendom and Islam* (Leiden: Brill) 159–81.

[34] The Chronicle of Theophanes provides descriptions of Maslama's conquests of many frontier towns between Anṭākiya and the Ǧazīra. (1982) *The Chronicle of Theophanes*, trans. H. Turtledove (Philadelphia: University of Pennsylvania Press) 74.

pottery fragments confirmed the Umayyad presence.[35] The ninth- and tenth-century Arab sources say that he invested in large agricultural estates locally as well as in the Sawād.[36] Near Bālis, he had the canal, called Nahr Maslamah, built to irrigate his lands, which were cultivated by the peasants of the villages of Buwailis, Qāṣirīn, ʿĀbidin, and Ṣiffin.[37] This initiative was supported by local Christian communities and native workmen, who had knowledge of Roman irrigation technology.[38]

The brother of Maslamah, Saʿīd b. ʿAbd al-Malik, who probably settled in the late Roman town of Mayadin in the south of Bālis, pursued similar initiatives. He acquired fertile lands known as Dawrīn, where he had an irrigation canal dug, the Nahr Saʿīd.[39] In the 1990s, the area of Fam Nahr Saʿīd in Syria was surveyed by Sophie Berthier,[40] whose fieldwork confirmed that this frontier and highly militarized zone in late antiquity, between Roman and Sasanian territories, experienced important economic growth from the early eighth century fostered by the new political and social context. Archaeobotanical studies have revealed that a more sophisticated agricultural regime developed consequently, combining cereals and local vegetables (barley, wheat, lentils, and peas in the winter, rice, sesame, and millet in the summer) with cucumbers and melons.[41]

Agricultural estates along the coast of the Mediterranean near Ascalon,[42] as well as nearby the major Near Eastern cities, came under the control of a city-based Muslim aristocracy from the late seventh to early eighth centuries. Bernard Geyer and Marie-Odile Rousset have argued that irrigated peri-urban farming increased in northern Syria from the rule of the Umayyad caliphs.[43] Later, these lands were continuously developed under the ʿAbbāsids,

[35] HAASE, Cl.-P. (2006), 'The Excavations of Madīnat al-Fār/Ḥiṣn Maslama on the Balikh Road', in H. Kennedy (ed.) *Muslim Military Architecture in Greater Syria. From the Coming of Islam to the Ottoman Period* (Leiden: Brill) 54–60.

[36] AL-BALĀḎURĪ (1866) 284. IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: Brill) 242–3.

[37] AL-BALĀḎURĪ (1866) 151.

[38] MORONY, M. G. (1991) 'The Aramaean Population in the Economic Life of Early Islamic Iraq', *ARAM* 3/1–2: 1–6. See, for instance, the example of Ḥassān al-Nabātī, a Christian mawlā at Baṣra who reclaimed land for al-Ḥağğāğ during the reign of al-Walīd I (705–15) and for Hishām (724–43) by draining the swamps of lower Iraq. He converted to Islam under the caliphate of Hishām. AL-BALĀḎURĪ (1866) 151.

[39] AL-BALĀḎURĪ (1866) 293–4.

[40] BERTHIER, S. (2001) 'Peuplement rural et aménagements hydroagricoles de la moyenne vallée de l'Euphrate entre la fin du VII^{e} et le XIV^{e} siècle', in S. Berthier (ed.), *Peuplement rural et aménagements hydroagricoles de la moyenne vallée de l'Euphrate* (Damascus: Ifpo) 162–4.

[41] SAMUEL, D. (2001) 'Archaeobotanical Evidence and Analysis', in S. Berthier (ed.) *Peuplement rural et aménagements hydroagricoles de la moyenne vallée de l'Euphrate* (Damascus: Ifpo) 437.

[42] AL-BALĀḎURĪ (1866) 128, 148, 150–1, 179–81.

[43] GEYER, B., ROUSSET, M.-O. (2011) 'Déterminants géoarchéologiques du peuplement rural dans les marges arides de Syrie du nord aux VII^{e}-IX^{e} siècles', in A. Borrut, M. Debié,

and the output could be significant, as reported by al-Yaʿqūbī. He indicates that ʿAbdallāh b. Ṣāliḥ, who was a cousin of ʿAbbāsid Caliph al-Manṣūr and established himself at Salamiyā in Syria, acquired lands in the late eighth century that he developed further through the digging of underground *qanāts* to cultivate saffron.[44] Saffron was the principal source of the yellow dye and one of the most costly agricultural commodities.[45] Similarly, the foundation of Islamic ʿAqaba led to the emergence of large-scale agricultural activities in its hinterland in the Wādī Araba and the southern Negev, combined with the intensive exploitation of the surrounding gold and copper mines. Archaeological traces of the *qanāts* that irrigated these estates, as well as remains of smelting camps in Evrona and Yotvata,[46] have been dated to the beginning of the eighth century. Chapter 5 explores the role this transformation of agricultural life in the context of a revival of landowning[47] (and the appropriation of Roman irrigation technologies) played in the development of urban economy. While Andrew Watson's theory of an Islamic 'green revolution'[48] has been convincingly critiqued,[49] the significant agricultural prosperity of the eighth- and ninth-century Negev and Jordan valley,[50] Orontes valley,[51] Ǧazīra,[52] and southern Iraq[53] allowed for an increased cultivation of cotton, indigo, or wheat. Commonly produced under the Romans, mainly in Egypt and the Sahara for the cotton, their increased cultivation, described by tenth-century Arab geographers, provided an enormous boost to the textile and milling industries.

A. Papaconstantinou, D. Pieri, J.-P. Sodini (eds.) *Le Proche-Orient de Justinien aux Abbassides. Peuplement et dynamiques spatiales* (Turnhout: Brepols) 77–92.

[44] AL-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 324.

[45] BULLIET, R. (2009) *Cotton, Climate, and Camels in Early Islamic Iran* (New York: Columbia University Press) 36.

[46] AVNER, U., MAGNESS, J. (1987) 'Early Islamic Settlement in the Southern Negev', *BASOR* 310 (1998) 39–56; Y. PORATH, 'Qanats in the 'Aravah', *Qadmoniot* 20: 106–14.

[47] WICKHAM, C. (2005) 241.

[48] WATSON, A. (2002) 'A Medieval Green Revolution: New Crops and Farming Techniques in the Early Islamic World', in M. Morony (ed.) *Production and the Exploitation of Resources* (Aldershot: Ashgate) 219–48.

[49] Watson's theory of an Islamic 'green revolution' has been critiqued from the crop point of view by Mike Decker: Decker, M. (2009), 'Plants and Progress: Rethinking the Islamic agricultural revolution', *Journal of World History* 20(2): 187–206, and from the point of view of irrigation technology by Andrew Wilson: Wilson, A. I. (2003) 'Classical water technology in the early Islamic world', in C. Bruun and A. Saastamoinen (eds.) *Technology, ideology, water: from Frontinus to the Renaissance and beyond* (Roma: Acta Instituti Romani Finlandiae), 115–41.

[50] AL-MUQADDASĪ (1877) 160, 186.

[51] MADELUNG, W. (1986) 'Apocalyptic Prophecies in Ḥomṣ in the Umayyad Age', *JSS* 31/2: 185.

[52] IBN ḤAWQAL (1939) 217, 221–3; AL-MUQADDASĪ (1877) *Aḥsan al-taqāsīm fī ma'rifat al-aqālīm* (Leiden: De Goeje) 141.

[53] IBN ḪURRADĀḎBIH (1967) *Kitāb al-masālik wa al-mamālik* (Leiden: Brill) 6–14; IBN ḤAWQAL (1939) 234.

4. TRADE

One of the most significant features of the Near Eastern world in early Islam was its growing economic importance as a *platform* between Eurasian and African trade. The debate regarding the appropriate conceptual framework to discuss the evolving nature of trade and cultural interchange in the eighth and ninth centuries is still fierce. Originally, it was propounded that the early Islamic world formed a vast and single body in Afro-Eurasia.[54] By sweeping away the late Roman–Sasanian border, the Islamic conquests created an economic zone from the Atlantic to the delta of the Indus that remained united up to 950. However, many researchers were sceptical of this view. The divergence of opinion rested on the significance given to the ʿAbbāsid revolution of 750.[55] It was argued that the transfer of the capital of the caliphate to Iraq after 750 marked a change in the priorities of the state, which ceased to support the western peripheries of the Empire.[56] While Umayyad caliphs and princes favoured the agricultural and commercial development of Greater Syria, scholars have suggested that the elevation of Baghdad in 762 led to a shift in economic focus from the Mediterranean to East Asia. The rise of the ʿAbbāsids was seen in the late-twentieth- and early-twenty-first-century historiography as having consequently led to the decline of Greater Syria, Egypt, and North Africa[57] from the second half of the eighth century up to the Fatimid dynasty in 909.

However, recent research has significantly modified our understanding of the regional economic dynamics of the early caliphate. They have demonstrated that the vagaries of global political changes did not necessarily alter provincial prosperity and that the 'centre-periphery' model was no longer suitable to discuss the economy of the Islamic caliphate during the eighth and ninth centuries. Far from being completely subjected to the authority of a 'core', the provinces of the early Islamic world retained economic

[54] DONNER, F. M. (1999) 32.

[55] See SAUER, J. A. (1982) 'The Pottery of Jordan in the Early Islamic Times', *SHAJ* 1 (ʿAmmān) 329–37. He provided one of the first comprehensive studies of early Islamic ceramics, in which the latest ceramic assemblages found on major sites all over southern Greater Syria were assigned to the Umayyad period as settlements were abandoned in the context of the transfer of the capital to Baghdad.

[56] See MAGNESS, J. (2003) *The Archaeology of the Early Islamic Settlement in Palestine* (Winona Lake: Eisenbrauns) 134. This theory was particularly supported by HAIMAN, M. (1995) 'Agriculture and Nomad-State Relations in the Byzantine and early Islamic Periods', *BASOR* 297: 45. Still, he recognized that the dating criteria of the late Umayyad and ʿAbbāsid potteries should be refined and that therefore settlements dated to the Umayyad reign may in fact have continuously existed up to the ninth century.

[57] FENWICK, C. (2013) 'From Africa to Ifrīqiya: Settlement and Society in Early Medieval North Africa (650-800)', *Al-Masāq* 25(1): 10–11.

independence, functioning both regionally and in response to the demand and influence of the Near Eastern mega-cities.

The development of regional surveys, as well as research on the material culture of late antiquity and the ʿAbbāsid period, has played a significant role in reshaping the traditional historiography. Social and economic histories of early Islam have gained considerably from the growing number of excavations and pottery studies from late Roman, Persian, and early Islamic sites across North Africa,[58] the Near East,[59] and the Persian Gulf. The evolution of excavation methods, pottery typologies, and classification of glass has led to a reassessment of the impact the Arab-Muslim conquests and the ʿAbbāsid revolution had on economic and settlement patterns in the Islamic peripheries. New studies of ceramics from well-stratified contexts demonstrated that the chronological tie-in between pottery types and dynastic history is much more fluid than previously thought. Many ceramic types traditionally identified as exclusively late Roman, such as the Palestinian Fine Table Ware,[60] continued to be in use and produced during the eighth and sometimes ninth centuries. Archaeologists and ceramologists also revised and brought more nuances to the typology of early Islamic pottery, revealing, for instance, that certain wares, which were thought to have been introduced under the Umayyads, such as the Mafjar Ware, and the Buff and Cream Wares, were actually produced after 750 from the late eighth century. As a natural consequence of refining the pottery typologies and dating criteria, scholars came to rewrite the history of many archaeological sites in North Africa, the Red Sea, and the Levant. For instance, Donald Whitcomb demonstrated that Khirbet al-Mafjar palace, which Robert W. Hamilton[61] described in the 1950s as having been abandoned after the earthquake of 749, enjoyed, in fact, a continued occupation in the second half of the eighth century.[62]

[58] FENWICK, C. (2013) 11–12.

[59] JOHNS, J. (1994) 'The Longue Durée: State and Settlement Strategies in Southern Transjordan Across the Islamic Centuries', in E. Rogan, T. Tell (eds.) *Village, Steppe and State: the Social Origins of Jordan* (London: British Academic Press) 8–9; WHITCOMB, D. (1992) 'Reassessing the archaeology of Jordan of the Abbasid period', *SHAJ* 4: 385–90. See more recently AVNI, G. (2014) *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach* (Oxford: Oxford University Press) 31.

[60] WALMSLEY, A. (2000) 'Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?', in I. L Hansen, C. Wickham (eds.) *The Long Eighth Century: Production, Distribution and Demand* (Leiden: Brill) 322.

[61] HAMILTON, R. W. (1959) *Khirbet al-Mafjar, an Arabian Mansion in the Jordan Valley* (Oxford: Clarendon Press); WHITCOMB, D. (1988) 'Khirbet al-Mafjar Reconsidered: The Ceramic Evidence', *BASOR* 271: 51–79.

[62] WALMSLEY, A. (2007b) *Early Islamic Syria, An Archaeological Assessment* (London: Duckworth) 55.

Material evidence of continuity in settlement patterns and economic life beyond the Umayyad period, identified in North Africa[63] and the Levant,[64] have proved that the revolution of 750 did not lead there to a transitional *dark age*. Corisande Fenwick's survey of the fragmentary archaeological data on early Islamic North Africa sheds light on the long-term occupation of most urban and rural sites in Morocco, Algeria, Tunisia, and Libya in the eighth and ninth centuries, despite significant transformations in settlement strategy. While the coastal zone became increasingly militarized,[65] the cities in the interior of North Africa and Spain, such as Kairouan, Tobna, Tāhert, Tlemcen, Fez, Cordoba, Toledo, or Saragossa grew significantly. Sijilmāssa in the Maghreb, founded in 757–8, notably became a key transit point for the traders, pilgrims, and travellers from Morocco, Spain, south Mauritania (Aoudaghost), North Africa (Ifrīqiya), and the Middle East.[66] The significant development of inland cities and terrestrial routes, archaeologically attested and described in the ninth-century itineraries of al-Yaʿqūbī and Ibn Ḫurradāḏbih,[67] responded, arguably, to the growing prominence of the Berber-Ibādī community and its monopoly of the trans-Saharan slave trade from the mid eighth to the late ninth century. The economic autonomy of western and central North Africa is the reason that the region did not collapse after the upheaval of the ʿAbbāsid revolution in 750.[68]

[63] FENWICK, C. (2013) 14; CAMBUZAT, P.-L. (1986) *L'Evolution des cités du Tell en Ifrīqiya du VIIe au XIe siècle* (Algiers).

[64] Many Levantine cities remained significant centres well into the medieval period, such as ʿAmmān, Jerusalem, Jarash, and Ramla. See GAWLIKOWSKI, M. (1986) 'A residential area by the South Decumanus', in *Jerash Archaeological Project* (ʿAmmān) 114–17 for structures still in use in the ʿAbbāsid period. USCATESCU, A. (1996) *La Cerámica del Macellum de Gerasa (Jordania)* (Madrid) 26, for a discussion of ceramics up to the tenth century. See also the report of the 1998 salvage excavation conducted at Yeḥezqel street in Ramla on behalf of the Antiquities authority by Y. Zelinger. An installation for processing or dyeing leather was uncovered as well as pottery sherds from the ʿAbbāsid period, including a bowl covered with a yellowish slip and glazed ceramics. Y. Zelinger, 'Ramla, Yeḥezqel Street', *ESI* 111 (2000): 57.

[65] It is thought that the increasing militarization of the Mediterranean coasts in the late antique/early Islamic period arose in the context of the progressive decline of the sea trade. However, the idea of a complete rupture of the Mediterranean trade between 600 and 800 should be tempered, as argued Ch. Picard recently. PIRENNE, H. [1937] (1992) *Mahomet et Charlemagne* (Paris: Alcan) 124–7; HODGES, R., WHITEHOUSE, D. (1983) *Mahomet, Charlemagne et les origines de l'Europe* (London: Duckworth) 30–81; BORRUT, A., PICARD, Ch. (2003) 'Rābata, Ribāt, Rābita: une institution à reconsidérer', in N. Prouteau, Ph. Sénac (eds.) *Chrétiens et musulmans en Méditerranée médiévale (VIII^e^-XIII^e^ siècle). Echanges et contacts* (Poitiers) 33–65; PICARD, Ch. (2015) *La mer des Califes. Une histoire de la Méditerranée musulmane. VII^e^-XII^e^ siècle* (Paris: Seuil).

[66] LIGHTFOOT, D. R., MILLER, J. A. (1996) 'Sijilmassa: The Rise and Fall of a Walled Oasis in Medieval Morocco', *Annales of the Association of American Geographers* 86(1): 78–101.

[67] IBN ḪURRADĀḎBIH (1967) 58, 61–2, 89; in al-Yaʿqūbī, see in particular the description of Tāhert and Sijilmāssa AL-YAʿQŪBĪ (1892) 356–60.

[68] SAVAGE, E. (1992) 'Berbers and Blacks: Ibādī Slave Traffic in Eighth-Century North Africa', *The Journal of African History* 33/3: 351–68.

In the same way, Kristoffer Damgaard,[69] who investigated the early medieval history of Red Sea ports, indicates that the Red Sea remained a vital commercial interface between the Islamic world and the rich interior of Africa from the eighth to the tenth century.[70] Since the 1990s, the excavations of the port of ʿAqaba in Jordan, the successor to Ayla nearby, have provided ample evidence of the functioning of this enclave economy. ʿAqaba developed as early as the late seventh century as a thriving *emporium* along the Red Sea, as attested by the discovery of kilns in the Radwan domestic area north of the port, dating to the Sufyānid period (661–84), that produced the ʿAqaba amphora' for the transport of oil or grain.[71] These amphorae were probably used alongside more perishable containers, such as basketry, hides, and sacks, to distribute the surplus of regional agricultural production from the Wadi Araba and southern Negev,[72] probably to the Ḥiǧāz, and the ports of Jiddah and al-Jar, as well as to the Yemen. Fragments of ʿAqaba amphorae have indeed been found all along the Red Sea and the Arabian coast. Excavations have shown that the city grew continuously from the eighth to the tenth century and that the ʿAbbāsid revolution of 750 did not hinder this process. After 800, the ninth century was even marked by the restructuring of domestic houses, where richer and more varied artefact assemblages were unearthed, including green-glazed jars, Iraqi and Egyptian lustre wares, Chinese celadon, and Arabian steatite. This confirms the growing prosperity of the port, owing to the buoyant exchanges between the coastal *emporia* of East Africa,[73] Arabia,

[69] DAMGAARD, K. (2009) 'A Palestinian Red Sea Port on the Egyptian Road to Arabia: Early Islamic Aqaba and its many Hinterlands', in *Connected Hinterlands: Proceedings of Red Sea Project IV held at the University of Southampton, September 2008* (Oxford: BAR) 85–97.

[70] DAMGAARD, K. (2011) *Modelling Mercantilism: An Archaeological Analysis of Red Sea Trade in the Early Islamic Period (650–1100 CE).* Unpublished PhD thesis, University of Copenhagen; NELSON, C. M. (2002) 'Evidence for early trade between the coast and interior of east Africa', in *Development of Urbanism from a Global Perspective*—Conference proceedings (Uppsala: Uppsala Universitet) 1–11.

[71] WHITCOMB, D (1989) 'Evidence of the Umayyad Period from the Aqaba Excavations', in R. Schick, M. A. Bakhit (eds.) *The Fourth International Conference on the History of Bilād al-Shām during the Umayyad Period* 2 ('Ammān: University of Jordan Press) 164–76; (1994a) 'The Miṣr of Ayla: Settlement of al-ʿAqaba in the early Islamic Period', in G. R. D. King, A. Cameron (eds.) *The Byzantine and Early Islamic Near East. Land Use and Settlement Patterns* (Princeton: Darwin Press) 155–70; (2001a) 'Ceramic Production at Aqaba in the Early Islamic Period', in E. Villeneuve, P. Watson (eds.) *La céramique byzantine et proto-islamique en Syrie-Jordanie (IVe-VIIIe siècles ap. J.-C.)* coll. BAH 159 (Beirut: Ifpo) 297–303.

[72] AVNER, U., MAGNESS, J. (1998) 'Early Islamic Settlement in the Southern Negev', *BASOR* 310: 39–56; PORATH, Y. (1987) 'Qanats in the ʿAravah', *Qadmoniot* 20: 106–14; SAIDEL, B. A. (2005) 'On the Periphery of an Agricultural Hinterland in the Negev Highlands: Rekhes Nafha 396 in the Sixth to Eighth Century C.E.', *Journal of Near Eastern Studies* 64(4): 241–55; WHITCOMB, D. (2006) 'Land Behind Aqaba: the Wadi Arabah during the Early Islamic Period', in P. Bienkowski, K. Galor (eds.) *Crossing the Rift. Resources, routes, settlement patterns and interaction in the Wadi Arabah* (Oxford: Oxbow) 239–42.

[73] POWER, T. (2008) 'The origin and development of the Sudanese ports ʿAydhâb, Bâ/di', Sawâkin in the early Islamic period', *Chroniques yéménites* 15: 92–110.

and the southern Levant, which came to attract a class of wealthy entrepreneurs in the late eighth and ninth centuries.

Towards the east, the recent work of Seth Priestman[74] on ceramic exchange in the Persian Gulf and western Indian Ocean from 400 to 1275 has also questioned the traditional historiography of the 1970s to 1990s.[75] Priestman argues that the rise of Baghdad in 762 did not give a particular impetus to the eastern commercial frontage of the Muslim world. By compiling for the first time the ceramic evidence found in the main *emporia* of the Persian Gulf, either published or archived, and examining it quantitatively, he argued that the overall proportion of long-distance trade remained relatively constant through time. There was, however, a greater diversity of merchandise in circulation from the Sasanian to the early Islamic era, perhaps because the maritime passages became the main commercial routes to China to the detriment of the terrestrial land routes across Central Asia, less used from the second half of the eighth century. Interestingly, Priestman indicates that the main drivers of the maritime economy were not long-distance exchanges from China to the Middle East. It is true that the discovery in 1995 of the well-preserved ninth-century Belitung cargo[76] in the Indonesian Seas provides evidence that large-scale trade was important. The wreck was probably on an outward journey from Yangzhou. It contained 70,000 Chinese stoneware ceramics, as well as gold and silver flagons, cups, and boxes,[77] to be sold most likely to the ʿAbbāsid court and wider elite circles in the Middle East.[78] The maritime itineraries of Arab and Persian traders up to Yangzhou, described in great detail by Chia Tan (730–805), a Chinese geographer,[79] and almost a century later, in the *Silsilat al-Tawārīẖ* compiled by Abū Zayd Sīrāfī after

[74] PRIESTMAN, S. (2013) *A Quantitative Archaeological Analysis of Ceramic Exchange in the Persian Gulf and Western Indian Ocean, AD c. 400–1275* (unpublished PhD thesis).

[75] HORNELL, J. (1941) 'Sea Trade in Early Times', *Antiquity* 15: 254; TIBBETTS, G. R. (1957) 'Early Muslim Traders in South-East Asia', *JMBRAS* 30: 29; COLLESS, B. (1969) 'Persian Merchants and Missionaries in Medieval Malaya', *Journal of the Malaysian Branch of the Royal Asiatic Society* 42(2): 11–16; WHITEHOUSE, D. (1988) 'Abbasid Maritime Trade: the Age of Expansion', in *Cultural and Economic Relations between East and West: sea routes* (Wiesbaden: Harrassowitz) 62–70.

[76] FLECKER, M. (2002) 'A Ninth-Century Arab or Indian Shipwreck in Indonesian Waters', *The International Journal of Nautical Archaeology* 29(2): 384–6; GUY, J. S. (2004) 'The Intan Shipwreck: a tenth-century cargo in South-East Asian waters', in *Song Ceramics: Art History, Archaeology and Technology. Colloquies on Art and Archaeology in Asia* 22 (London: University of London, Percival David Foundation of Chinese Art, SOAS) 171–92.

[77] Related specimens have been found in the Tang imperial palace area at Chang'an as well as in Sāmarrā. NORTHEDGE, A., KENNET, D. (1994) 'The Samarra Horizon', in E. Grube (ed.) *Cobalt and Lustre. The First Centuries of Islamic Pottery* (London) 21–35.

[78] STARGARDT, J. (2014) 'Indian Ocean trade in the ninth and tenth centuries', *South Asian Studies* 30(1): 35–55.

[79] OU YANG, H. (1967) *Hsin T'ang Shu* (Taiwan: Po-na edition) ch. 43 b.

886,[80] represent also a confirmation of the significant proportion of large-scale trade in the Persian Gulf and the Indian Ocean in the eighth and ninth centuries.[81] However, Priestman shows that it is actually regional-scale exchange between the great *emporia* of the Persian Gulf and western Indian Ocean, like Sīrāf,[82] Kush near Ras al-Khaimah,[83] and Ras al-Hadd in Arabia, Mantai in Sri Lanka, which represented the dominant proportion of the trading activities taking place. The vast majority of the ceramic vessels found within these *emporia* and compiled by the archaeologist was not exotic but produced locally. The assemblages contained mainly fragments of tablewares, such as cooking pots, jars, bowls, as well as transport containers. Regional exchange mechanisms thus dominated an area functioning as a *microcosm* in the eighth and ninth centuries.

Further north, trade with the Slavic and Scandinavian communities was another segment in the vast economic system of the Islamic caliphate in the ninth century. Numismatic evidence[84] gives rise to the possibility that this trade began as early as the late eighth century and increasingly expanded in the ninth and tenth centuries, notably after the rise of the Sāmānids in Transoxiana from 875. Hundreds of deposits of Islamic dirhams across central and

[80] This book contains an earlier anonymous account completed in 851 and entitled *Aḫbār al-Ṣīn wa al-Hind*. SAUVAGET, J. (1948) *Aḫbār al-Ṣīn wa al-Hind* (Paris: Les Belles Lettres); ABU ZAYD AL-SĪRĀFĪ (2017) *Accounts of China and India*, trans. T. Mackintosh-Smith (Abu Dhabi: Library of Arabic Literature).

[81] From al-Ubulla in Iraq, they engaged in cabotage along the Persian Gulf up to the port of Sīrāf. Then, they sailed to the Gulf of Oman and dropped anchor at Bahrain and Muscat. After a month of sailing, they reached the Laccadive Sea coast of India and the thriving port of Kollam. Nearby, they sailed to the island of Ceylon before crossing over the Bay of Bengal and the Nicobar and Andaman Islands, on the way to Thailand and Malaysia. Lastly, they embarked upon a voyage across the China Sea up to the great medieval *emporium* of Yangzhōu. IBN MĀSAWAYH (1933) ‘Kitāb al-āzmina’, *BIE* 15: 235–57; SAUVAGET, J. (1948) 3–5, 6, 7–8; IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: Brill) 25; IBN ḪURRADĀḎBIH (1967) 43, 51. See also SRISUCHAT, A. (1996) ‘Merchants, Merchandise, Markets: Archaeological Evidence in Thailand Concerning Maritime Trade Interaction between Thailand and Other Countries before the 16th Century A.D.’, in N. Chutiwongs et al. (eds.) *Ancient Trades and Cultural Contacts in South East Asia* (Bangkok: The Office of the National Culture Commission) 246; BRONSON, B. (1996) ‘Chinese and Middle Eastern Trade in Southern Thailand during the ninth century’, in N. Chutiwongs et al. (eds.) *Ancient Trades and Cultural Contacts in South East Asia* (Bangkok: The Office of the National Culture Commission) 181–200.

[82] In the ninth century, Sīrāf, the main port of call of Fārs since the Sasanids, reached its full impact up to the late tenth century, when an earthquake in 977 brought about its decline. Its riches were derived almost entirely from the trading network that supplied the Middle East with products from India and the Far East.

[83] KENNET, D. (1997) ‘Kush: a Sasanian and Islamic-period archaeological tell in Ras al-Khaimah (UAE)’, *Arabian Archaeology and Epigraphy* 8: 284–302.

[84] NOONAN, T.S. (1980) ‘When and How Dirhams First Reached Russia’, *Cahier du monde russe* 21/3–4: 401–69.

northern Europe,[85] that were used to purchase slaves,[86] but also yellow amber[87] and various types of fur (ermine, fox, marten, sable),[88] have survived. With the exception of the presence of a few Sasanian and Umayyad coins, the largest component of dirhams hoarded was minted after the late 780s. The capital of Itil[89] in Ḫazaria on the Volga, close to the Caspian Sea, and the city of Bulgar,[90] the administrative centre of Volga Bulgaria at the confluence of the Volga and Kama rivers, developed as major *emporia* at the point of convergence, where Ḫwārāzmian and Caucasian traders from the ʿAbbāsid caliphate, Slavic and Scandinavian communities, met to conduct their exchange. From 875, this commerce expanded dramatically, as the Sāmānids started to control the Ḫwārāzmian trading networks and became involved in the lucrative trade of slaves from the northern lands. This soon became their monopoly, as confirmed by the numismatic finds in northern and central Europe. The catalogue of the dirhams hoarded from the late ninth century to 960, established by Marek Jankowiak and Luke Treadwell,[91] show that the most recent coins used to purchase slaves, military equipment, and furs were henceforth generally struck in the Sāmānid territories. Imitations of Sāmānid dirhams were even struck in Itil and Bulgar. In their role as intermediaries between the European suppliers and the Muslim buyers, the native communities of Itil and Bulgar probably minted them to ensure liquidity to facilitate trade.[92]

[85] HODGES, R. (1982) *Dark Age Economics* (London: Duckworth) 81–6; JENSEN, J. S., KROMANN, A. (1998) 'Cufic Coins in Denmark', in E. Piltz (ed.) *Byzantium and Islam in Scandinavia* (Jonsered: Åströms) 71–6; TALVIO, T. (1998) 'Islamic Coins Found in Finland', in E. Piltz (ed.) *Byzantium and Islam in Scandinavia* (Jonsered: Åströms) 77–84; McCORMICK, M. (2001) *Origins of the European Economy. Communications and Commerce* (New York: Cambridge University Press) 345–51.

[86] 'Kitāb al-Tabaṣṣur bi al-Tiǧāra', *Revue de l'Académie arabe de Damas* 12 (1932): 342. The *Kitāb al-Tabaṣṣur bi al-Tiǧāra* is neither dated nor signed in. However, it may well have been compiled in the ninth century by al-Ǧāḥiẓ for the ʿAbbāsid court on the basis of information gathered from Caucasian and Ḫwārāzmian traders. It includes an interesting list of the merchandise imported from the northern lands.

[87] LEWICKI, T. (1963) 'Ecrivains arabes du siècle IXe au XVIe, traitant de l'ambre jaune de la Baltique et de son importation en pays arabes', *Folio Orientalia* 4: 1–39. Lewicki stresses the significant role the Ḫwārāzmian traders played in the importation of yellow amber to the Middle East. The amber from the Baltic Sea was used in the Middle East, since the Sasanian period, for its healing properties according to the tenth-century physician al-Rāzī or in the finest jewellery.

[88] 'Kitāb al-Tabaṣṣur bi al-Tiǧāra', (1932) 335–6.

[89] Archaeological evidence of Itil may have been recently found during excavations in the vicinity of Astrakhan (Samosdelka hillfort) in eastern Russia. FINKELSHTEYN, N. (2008) 'Itil, Long-lost Khazar Capital, Said to Be Found', *Hadassah Magazine* 90(4): 23. On the Jewish Ḫazar trading communities of Itil in the ninth century, see LEWICKI, T. (1961) 'Les sources hébraïques consacrées à l'histoire des l'Europe Centrale et Orientale et particulièrement à celle des pays slaves de la fin du IXe au milieu du XIIIe siècle', *Cahiers du monde russe et soviétique* 2(2): 228–41.

[90] IBN ḪURRADĀḎBIH (1967) 95, 116.

[91] JANKOWIAK, M. (2013) 'Two Systems of Trade in the Western Slavic Lands in the Tenth Century', in M. Bogucki, M. Rebkowski (eds.) *Economies, Monetisation and Society in the West Slavic Lands, 800–1200 AD* (Szczecin) 137–48.

[92] JANKOWIAK, M. (2013) 140.

The Muslim conquests seem thus to have generated an economic unit, but within a system that remained, in fact, quite regionally segmented and autonomous. It brought together regions with distinctive identities, where local exchange of subsistence goods and powerful *emporia* developed extensively from the early eighth century. The Near East became in early Islam a gateway between these Islamized areas that various trading diasporas interconnected with.[93] The combination of buoyant regional economies and infrastructures, as well as trans-regional elites, ensured the success of long-distance trade in the early Islamic caliphate, by minimizing the danger of large-scale exchange, owing to the limitations of ancient naval or terrestrial transportation and the risks of journeying to far-off lands. While the difference between local trade and long-distance trade may at first seem to be one of geographic distance, their social structure is very different. Long-distance trade could be extremely profitable, as opposed to local trade; hence the actors differ, as well as the level of investment. This book discusses how the changing power and economic dynamics after the rise of Islam affected retailing and craft, and Chapter 9 more specifically investigates how the economic context of the early Islamic caliphate reshaped the character of Near Eastern urban traders, who emerged from the ninth century as a class of great entrepreneurs, engaging in multiple partnerships.[94]

[93] On trading diasporas, as agents of Afro-Eurasian interaction in early Islam, see the publications on the Rādhānite merchants, the H̱wārāzmian traders, the Jewish diaspora, the Ibādī berbers, and the Persian seafaring communities. On the Rādhānites, see their description in the medieval records IBN H̱URRADĀḎBIH (1967) 153–4 and the historiographical debate GIL, M. (1974) 'The Rādhānite Merchants and the Land of Rādhān', *JESHO* 17(3): 299–328; SIMONSEN, D. (1907) 'Les marchands juifs appelés radanites', *REJ* 54: 141–2; CAHEN, Cl. (1971) 'Quelques questions sur les Radanites', *Der Islam* 47: 252–64; RABINOWITZ, L. (1944–5) 'The Routes of the Radanites', *JQR NS* 35: 251; and finally ASHTOR, E. 1978. 'Aperçus sur les Rādhānites', in *Studies in the Levantine Trade in the Middle Ages* (London: Variorum) 245–65.

On the Ibādī berbers, see AILLET, C. (ed.) (2012) *L'Ibadisme, une minorité au coeur de l'Islam* (coll. Numéro spécial de la Revue des Mondes Musulmans et de la Méditerranée 132). On Jewish diasporas in early Islam, see in particular the publications of S. Goitein and more recently Ph. Ackerman-Lieberman. ACKERMAN-LIEBERMAN, Ph. (2014) *The Business of Identity: Jews, Muslims, and Economic Life in Medieval Egypt* (Redwood City: Stanford University Press); (2015) 'Jewish Occupational Choice and Urbanisation in Iraq under the Early Abbasids', *Jewish History* 29: 113–35.

[94] On partnerships in early Islam, see IBRAHIM, M. (1990) *Merchant Capital and Islam* (Austin: University of Texas Press) 41–3; GOITEIN, S. D. (1964a) 'Commercial and Family Partnerships in the Countries of Medieval Islam', *Islamic Studies* 3: 315–37; RĀĠIB, Y. (1991) 'La plus ancienne lettre arabe de marchand', in *Documents de l'Islam médiéval, nouvelles perspectives de recherche* (Cairo: Ifao) 2–9; (1988) 'Marchands d'Égypte du VII^{e} au IX^{e} siècle d'après leur correspondance et leurs actes', in *Actes des congrès de la société des historiens médiévistes de l'enseignement supérieur public, XIX^{e} congrès* (Reims) 25–33.

Part I

Patronage and Power

2

A Stamp of Authority

In late antiquity, the secular and religious elites played a fundamental role in the patronage of urban economic activities across the Mediterranean and in Sasanian Persia. A significant overlap existed between domesticity, craft, and trade in the late Roman Empire, as far as can be reconstructed from literary testimonies and archaeological remains in Europe, North Africa, and the Levant. Many elite residences included workshops inside their *atria* or incorporated commercial spaces. This was the case in Roman Pompeii[1] in Italy, and Zeugma and Antioch in the Near East, where dwellings and workplaces were finely intertwined and in which little distinction existed between domesticity and economy.[2] Workshops and *tabernae* were built for private use, or as investments and rental units for craftspeople and traders. Yet, beyond financial benefits, through patronage and landowning the Roman elites found an opportunity to raise their social status before both emperors and governors.[3] They were providing cities with the amenities of civilized Roman life and received public honours and economic benefits in return.[4] In Sasanian Persia, urban economy was more closely bound into the system of royal patronage. Still, the elites also held significant autonomous control over the production and distribution of resources.[5]

After the rise of Islam, Christian and Zoroastrian elites remained involved in production and retailing, as illustrated by the continuous role of Christian monks in building amenities for the large-scale production of wine, oil,

[1] FLOHR, M. (2012) ‘Working and Living under One Roof : Workshops in Pompeian Atrium Houses’, in A. Anguissola (ed.), *Privata Luxuria: Towards an archaeology of Intimacy: Pompeii and Beyond* (Munich: Herbert Utz) 51–72.

[2] See Chapter 1.

[3] FLOHR, M., WILSON, A. (2016) ‘Introduction: Craftsmen, Traders, and the Wider Debate’, in A. Wilson, M. Flohr (eds.), *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 15; WALLACE-HADRILL, A. (1991) ‘Elites and Trade in the Roman Town’, in J. Rich, A. Wallace-Hadrill (eds.), *City and Country in the Ancient World* (London: Routledge) 241–72.

[4] NICOLS, J. (2014) *Civic Patronage in the Roman Empire* (Leiden: Brill) 10–11.

[5] HALDON, J. (1993) *The State and the Tributary Mode of Production* (London: Verso) 140–54.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020). © Fanny Bessard.
DOI: 10.1093/oso/9780198855828.001.0001

ceramic, or metal.[6] For example, eighth- and ninth-century wine and oil presses have been discovered in the monasteries of Sobata[7] in the Negev and Deir Ghazali[8] near Jerusalem. The monastery of Dayr Samwīl in Palestine remained a significant contributor to the production of jars in the region, with seal impressions made in Arabic after the rise of Islam. These Arabic-stamped containers were used for storage and trade, and have been found in Jerusalem, Caesarea, and Ramla.[9] In a chronicle of 1234, the description of the life of the scribe Athanasius Bar Gumoyē from the Jacobite *bourgeoisie* of Edessa, during the rule of ʿAbd al-Malik b. Marwān (685–705), also provides confirmation of the uninterrupted influence of the urban local elites in cities' economies after the Arab-Muslim conquests. Athanasius was a powerful figure of Edessa and a patron of nine hostels and many shops and workshops in the late seventh and early eighth centuries.[10] According to the ninth-century bishop Thomas of Marǧā, the early eighth-century caravanserai of Mosul was also privately built by Ayās al-Ḏuhl al-Šaybānī. Al-Šaybānī had long been in charge of the larder of the monastery of Rabban Bār Idta. When the monastery was abandoned in the late seventh century, Ayās al-Ḏuhl al-Šaybānī had the hostel built on the privatized monastic estate. Thomas of Marǧā's account is certainly a late testimony, written more than a century after the events described. However, it is a local source, based on earlier testimonies from monks.[11]

While private patronage of urban trade and production, common in late antiquity, remained active in the early medieval Near East, the rise of Islam and the caliphate saw an increasing intervention of Arab-Muslim caliphs and governors—in the form of substantial investment—in urban retailing and crafts in the eighth and ninth centuries. Questions remain as to the chronology of this evolution and its significance. How did this favour economic growth and serve the interests of caliphs? To what extent did this act as a stamp of authority in the context of the assertion of the Umayyad and ʿAbbāsid aristocracy? What was the relationship between imperial patrons and benefactors? Did the evolution in the patronal system participate in the development of a social structure that differed notably from that of Western Christendom?

[6] HARRAK A. (1999) *The Chronicle of Zuqnīn* (Toronto: Pontifical Institute) 192. Zuqnīn mentions the monk Isaac of the monastery of Qartmin in Ǧazīra, who was practising alchemy of silver and gold during the reign of al-Manṣūr in the late eighth century.

[7] FIGUERAS, P. (1995) 'Monks and Monasteries in the Negev Desert', *Liber Annuus* 36: 439.

[8] AVNI, G. (2014) *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach* (Oxford: Oxford University Press) 147.

[9] MAGEN, Y., DADON, M. (2003) 'Nebi Samwil (Montjoie)', in G. C. Bottini et al. (eds.) *One Land—Many Cultures; Archaeological Studies in Honour of Stanislao Loffreda* (Jerusalem: Franciscan Printing Press) 123–38.

[10] PALMER, A. (1993) *The Seventh Century in the West Syrian Chronicles* (Liverpool: Liverpool University Press) 203.

[11] THOMAS OF MARǦĀ (1893) 142/294, 198/386.

1. A CALIPHAL *OFFICIUM*

Although the contemporary evidence for any ruling involvement in the late seventh and early eighth centuries is extremely limited, from congruent later material containing indirect accounts orally transmitted we can extrapolate that a rising Arab-Muslim governmental elite pursued an entrepreneurial and investment policy as early as the time of the Umayyad caliphate.[12] Caliphs and regional governors played an increasingly prominent role in the refurbishment of old marketplaces and the sponsorship of new areas of trade and production from the late seventh century.[13] This policy, upon which the Umayyads initially relied to legitimize their rule, arguably became part of a wider plan to strengthen the grasp of imperial control over the urban economy, its regulation and taxation.

A story, reported in al-Samhūdī's (d. 1506) fifteenth-century history of Medina, suggests that, during his reign, Caliph Muʿāwiya (661–80) initiated this practice by founding the covered markets of *dār al-qaṭirān* and *dār al-nuqṣān* in the holy city of Medina and converting a pre-existing residential property into a market for dried dates.[14] This story is based on the now lost earlier account of Ibn Zabāla, who was a native of Medina and died after 814. Harry Munt[15] has pointed out that Ibn Zabāla offers a late-eighth-century presentation of Medina; Muʿāwiya's agenda for developing marketplaces in the holy city may have been a myth. Even if this is the case, Ibn Zabāla was very likely inspired by the practice of his time, and this shows that the patronage of urban economic amenities was of interest for the ruling elite at least from the time of the late Umayyad or very early ʿAbbāsid dynasty.

The reliability of the other accounts we possess on the early Umayyad elite's investment in urban retailing and crafts is equally debatable. Composed in the ninth and tenth centuries, they all come from the contemporary historians Ibn ʿAbd al-Ḥakam (d. 871), al-Balāḏurī (d. 892), and Ibn Baḥšal (d. 904/5), and depict the caliphate of ʿAbd al-Malik (685–705) as having been a period of intense building of retail stores across Egypt, Greater Syria, and Iraq, by princes and local governors. The chronicle of the Egyptian Ibn ʿAbd al-Ḥakam

[12] M. Shatzmiller suggests that early Islam was marked by an economic growth. The difficulty, however, remains the absence of contemporary and quantifiable sources for the first centuries of Islam, which would allow a fair comparison with the highly sophisticated and prosperous Roman economy. SHATZMILLER, M. (2011) 'Economic Performance and Economic Growth of the Early Islamic Period (650-1000)', *Sources and Approaches across Disciplines in the Near Eastern Studies—Proceedings of the 24th Congress of the UEAI* (Leuven: Peeters) 271–305.

[13] SHATZMILLER, M. (2011) 271–305.

[14] AL-SAMHŪDĪ (1975) *Wafā' al-wafā' bi-aḫbār dār al-muṣṭafā* 2 (Beirut) 750.

[15] See Harry Munt's discussion on Ibn Zabāla and his history of Medina, in (2013) 'The Prophet's City before the Prophet: Ibn Zabāla (d. after 199/814) on Pre-Islamic Medina', in P. Wood (ed.) *History and Identity in the Late Antique Near East*, (Oxford: Oxford University Press) 103–20.

relates, for instance, that the growth of the town of Fusṭāṭ, during the governorship of ʿAbd al-ʿAzīz, brother of ʿAbd al-Malik, led to the expansion of the great mosque of ʿAmr b. al-ʿĀṣ,[16] as well as the construction of a roofed *qayāsir* and several warehouses (*dūr*).[17] According to the chronicler Ibn Baḥšal, several *sūq*s were also built at the very end of the seventh century in Wāsiṭ in Iraq, under the order of governor Yazīd b. Abī Muslīm. The governor designed them to function as a set of defined zones for various commodities. The streets took on the name of the trade plied there, such as fragrance shops (*ʿaṭṭārīn*) and grocers (*baqqālīn*).[18] The account of al-Balāḏurī indicates that ʿAbd al-Malik's policy influenced his son, Prince Sulaymān, who patronized the foundation of a workshop for the production of costly dyed fabrics (*dār al-ṣabbāghīn*) when he had the city of al-Ramla built in Palestine in 715.[19] This narrative may of course simply be a later invention to celebrate Caliph ʿAbd al-Malik, whose reign characterized by order, political unity, and expansion corresponded to ʿAbbāsid expectations in the ninth and tenth centuries. This said, the accounts' accuracy would come as no surprise considering the amount of work the caliph conducted to facilitate the pilgrimage and ease of trade, as illustrated in the dozen Arabic inscriptions on milestones found across southern Greater Syria.[20]

Caliph ʿAbd al-Malik's reform of the administration and public finances in 685–705 may have fostered this evolution in the patronal system. This included the implementation of a revised system of tax collection, assessment, and distribution,[21] as well as the development of a complex relationship of clientele between the Muslim imperial authorities, their provincial representatives, and the native elites. While this helped to consolidate Muslim authority locally, in particular after the rebellion of ʿAbd Allah ibn al-Zubayr in Arabia in autumn 692, it may have resulted in the increasing imperial presence in urban economic life.

[16] IBN ʿABD AL-ḤAKAM (1922) *Futūḥ Miṣr* (New Haven: Yale University Press): 131–2; P. SIJPESTEIJN (2013) *Shaping a Muslim State: the World of a Mid-Eighth-Century Egyptian Official* (Oxford: Oxford University Press) 79–80.

[17] IBN ʿABD AL-ḤAKAM (1922), *Futūḥ* 136.

[18] IBN BAḤŠAL (1967) *Taʾrīḫ Wāsiṭ* (Baghdad: Gurguis ʿAwwād) 43.

[19] AL-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 143. SOURDEL, D. (1981) 'La fondation umayyade d'al-Ramla en Palestine', in A. Noth (ed.) *Studien zur Geschichte und Kultur des Vorderen Orients* (Leiden: Brill) 389; ROSEN-AYALON, M. (1996) 'The First Century of Ramla', *Arabica* 43: 250–63.

[20] These inscriptions are discussed in the following publications. VAN BERCHEM, M. (1922) *Matériaux pour un Corpus Inscriptionum Arabicarum* 2, tome 1-fascicule 1 (Cairo: Ifao) 3–29; SHARON, M. (1966) 'An Arabic Inscription From the Time of the Caliph ʿAbd al-Malik', *BSOAS* 29/2: 367–72; ELAD, A. (1999) 'The Southern Golan in the Early Muslim Period. The Significance of Two Newly Discovered Milestones of ʿAbd al-Malik', *Der Islam* 76: 33–88; CYTRYN-SILVERMAN, K. (2007) 'The Fifth mīl from Jerusalem: another Umayyad milestone from southern Bilād al-Shām', *BSOAS* 70: 603–10.

[21] This included the absence of tax exemption for religious representatives.

From the end of the seventh century, provincial administration and tax collection fell into the hands of regional governors, nominated by the imperial authority, as well as their *quḍā'* and the fiscal officers of the office of taxation (*dīwān al-ḫarāǧ*).[22] This situation contrasted greatly with the late Roman period, when provincial governorship was the preserve of the locally dominant aristocratic families and religious authorities under the rule of Justin II (565–78). Still, provincial governors under the Umayyads cooperated with the native urban elite in Greater Syria, landowning elite (*dihqān*s[23] and *shahāriǧa*s)[24] in Iraq and Ǧazīra, (*naḫarar*) in Armenia, as well as with the local deacons, archdeacons, and abbeys[25] to collect taxes. However, this native aristocracy was much less empowered, and ʻAbd al-Malik's reforms therefore succeeded where Justinian's ones of the mid sixth century failed.[26] This reshaping of the relationship between caliphal authority and the late antique nobility constituted a major break with late antiquity, and was essential in the implementation of an imperial economic policy at the provincial level. Furthermore, in contrast with the late antique fiscal system,[27] fiscal resources were

[22] KENNEDY, H. (1981) 'Central Government and Provincial Elites in the Early ʻAbbāsid Caliphate', *BSOAS* 44(1): 26–38; (1995) 'The Financing of the Military in the early Islamic State', in A. Cameron (ed.) *The Byzantine and Early Islamic Near East States, Resources and Army* 3 (Princeton: Darwin Press) 363, 371; (2001) *The Armies of the Caliphs* (London: Routledge) 63–5, 71–6.

[23] For the involvement of the *dihqān*s in the early Islamic tax-collection apparatus in Iraq, see AL-ṬABARĪ [Leiden: De Goeje, 1879–1901] (1964) *Ta'rīḫ al-rusul wa al-mulūk*, Secunda Series (Leiden: De Goeje) 1029; DURI, A. (2011) *Early Islamic Institutions. Administration and Taxation from the Caliphate to the Umayyads and ʻAbbāsids* (London: I.B. Tauris) 110; MORONY, M. (1984a) *Iraq after the Muslim Conquest* (Princeton: Princeton University Press) 102–3.

[24] For the involvement of the *shahāriǧa*s in the early Islamic tax-collection apparatus in Ǧazīra, see HARRAK, A. (1999) 237, 240; ROBINSON, Ch. (2000) *Empire and Elites after the Muslim Conquest* (Cambridge: Cambridge University Press) 96–7.

[25] HOYLAND, R. (1997) *Seeing Islam as Others Saw It* (Princeton: Darwin Press) 194; *Synodicon orientale* (1902) coll. Notices et extraits des manuscrits de la Bibliothèque Nationale 37 (Paris) 225–6. In particular, in the Diyār Muḍar at Edessa and the Diyār Bakr at Dārā or Nisibis, the bishop Ishoʻyahb would have played an important intermediary role in the taxation process around 650. PAYNE, R. (2009) 'Persecuting Heresy in Early Islamic Iraq: The Catholicos Ishoyahb III and the Elites of Nisibis', in N. Lenski, A. Cain (eds.) *The Power of Religion in Late Antiquity* (Aldershot: Ashgate) 397–409; HOYLAND, R. (2008) 'Jacob and Early Islamic Edessa', in Bas Ter Haar Romeny (ed.) *Jacob of Edessa and the Syriac Culture of His Day* (Leiden: Brill) 11–25.

[26] SARRIS, P. (2010) *Economy and Society in Age of Justinian* (Cambridge: Cambridge University Press) 219–22.

[27] LUKONIN, V.G. (1996) 'Political, Social and Administrative Institutions: Taxes and Trade', *CHI* 3(2): 735; SARRIS, P. (2010) *Economy and Society in Age of Justinian* (Cambridge: Cambridge University Press) 208–9. Between 530 and the Muslim conquests, there was an attempt of the late Roman Empire and Sasanian Persia to drain the fiscal revenues to the imperial capital to pay the army, particularly in the context of the Roman–Persian wars. Imperial officials—such as the Āmārgars in Iran or the Vindex in Africa—were dispatched to control the activities of local tax collectors and ensure that the fiscal revenues are paid to the central government.

henceforth redistributed locally from the end of the seventh century to serve the interests of local communities, and only a small portion was sent to the imperial authorities in Damascus.[28] The Near Eastern provinces gained significant fiscal powers, and revenue was employed to build the Umayyad mosques of Kūfa[29] and Damascus,[30] as well as to build fortifications in Baṣra and Kūfa in 771,[31] and ʿĀqūlā in Ǧazīra in 772–3,[32] plus to maintain military garrisons[33] and, of course, develop urban retailing and crafts. This was then in sharp contrast to what was happening in Byzantine Asia Minor. From the early or mid seventh century, in the context of the loss of their fiscal independence, as well as a redefinition of their role in the state, many Anatolian cities became villages or *kastra*.[34] Archaeological surveys in Cappadocia, Psidia, Paphlagonia, and Lycia[35] have proved that late antique monuments were abandoned, ruined by the passage of time, earthquakes, or Persian sacks, public space was taken over by private constructions, and some cities were relegated to no more than defended sites.

Caliph Hishām, who ruled from 724 to 743, is the first ruler whose deliberate sponsorship of urban retail and craft through local governors can be safely inferred from contemporary archaeological and written evidence. Archaeological evidence comes in the form of the famous dated Arabic inscriptions of the Umayyad *sūq* of Silvanus Street in Baysān that developed as a lively

[28] Under the reign of the Umayyads, al-Ṭabarī said that the remainder was sent to Damascus by the provincial fiscal officers in the local *dīwāns*—in 722–3, for instance, the officer in charge of the *dīwān* of Medina, Ibn Hurmuz, was returning each year the remainder of the local yearly fiscal revenues of Arabia to Caliph Yazīd b. ʿAbd al-Malik (720–4). The provincial governors could also delegate this responsibility to the local elites, as was the case in early-eighth-century Ifrīqiya. Caliph ʿUmar II (717–20) indeed received every year the *ǧibāya* (Ifrīqiyen fiscal revenues) of Ifrīqiya from a delegation of ten dignitaries who guaranteed, under oath, that the local soldiers got their pensions (*ʿaṭā'*) and the children their *rizq*. AL-ṬABARĪ, Secunda Series (1964) 1450; KENNEDY, H. (1995) 'The Financing of the Military in the Early Islamic State', in A. Cameron (ed.) *The Byzantine and Early Islamic Near East. States, Resources and Armies* 3 (Princeton: Darwin Press) 376.

[29] AL-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 286.

[30] IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: Brill) 175.

[31] AL-ṬABARĪ, Tertia Series (1964) 373–4.

[32] HARRAK, A. (1999) 276–7.

[33] For instance, the maintenance of the military garrison of Kūfa under the Umayyads rested on the local fiscal revenues. The geographer al-Yaʿqūbī indicates that in the early eighth century, under the governorate of Ḫālid al-Qasrī (723–37), the revenues of the city shops and workshops were used to cover the salary of the army. AL-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 311. Similarly, the chronicler al-Ṭabarī relates that the costs of the military garrisons in ninth-century Baghdad were covered by the revenues of the local land tax (*ḫarāǧ*) during the caliphates of al-Manṣūr—AL-ṬABARĪ, Tertia Series (1964) 444—and later al-Ma'mūn—AL-ṬABARĪ, Tertia Series (1964) 1011.

[34] HALDON, J. (1990) *Byzantium in the Seventh Century: the Transformation of a Culture* (Cambridge: Cambridge University Press) 96–9.

[35] BRUBAKER, L., HALDON, J. (2011) *Byzantium in the Iconoclast Era, C. 680–850* (Cambridge: Cambridge University Press) 538–44.

commercial town after the rise of Islam.[36] The mosaic inscriptions commemorate its foundation following an order given by the caliph and his governor Isḥāq b. Qabīṣa in 738 (figs. 2.1 and 2.2).[37] When taken with later literary evidence, these inscriptions certainly give cause to suspect that the foundation of these new shops in Baysān was but one example of a conscious imperial impetus to patronize. They are striking illustrations of early Muslim caliphs' use of material culture to assert their identity among a predominantly Christian and Jewish population. The mosaic inscriptions would no doubt have constituted a reminder of the benevolence of caliphal authority, thereby strengthening the allegiance of the people.

The literary sources point to this, too. During the reign of Hishām, when the former military base of Kūfa in Iraq evolved into a city, the governor H̱ālid al-Qasrī (723–37) promoted the development of permanent marketplaces. The account of this comes from the ninth-century history of al-Ṭabarī, which is based on an earlier testimony from the local historian Abū Miḫnaf (d. 774). Abū Miḫnaf[38] was a respected Umayyad historian and native of Kūfa who wrote extensively on the first Islamic dynasty. He was a scrupulous scholar who used family records, accounts of his own tribe of al-Azd, and other Kūfan testimonies, and whose information can therefore be regarded as reliable. Abū Miḫnaf reports that in Kūfa's military base merchants were originally operating haphazardly.[39] They traded in empty areas under awnings covered by straw mats and supported by reed piles. This changed under the governorship of H̱ālid al-Qasrī, during which time the original collection of tents developed into an established settlement. H̱ālid encouraged traders to specialize in particular activities and to carry out their business from a permanent location. It is mentioned that he patronized the foundation of shops along the northern and eastern sides of the congregational mosque. The geographer al-Yaʿqūbī later signals that the shops were not allocated randomly to the merchants, but according to their professions for a cash rent.[40] This practice was not unprecedented but adopted from the Byzantine model. While Abū Miḫnaf's report that the development of Kūfa marketplaces was politically supervised under

[36] For more on early Islamic Baysān, see FOERSTER, G., TSAFRIR, Y. (1994) 'From Scythopolis to Baysān, Changing Concepts of Urbanism', in G. R. D. King and A. Cameron (eds.) *The Byzantine and Early Islamic Near East* 2 (Princeton: Darwin Press) 101–5.

[37] KHAMIS, E. (2001) 'Two Wall Mosaic Inscriptions from the Umayyad Market Place in Baysān', *BSOAS* 64/2: 159–76; (2007) 'The Shops of Scythopolis in Context', in L. Lavan et al. (eds.) *Objects in Contexts, Objects in Use* (Leiden: Brill) 447–9.

[38] For a discussion on Abū Miḫnaf, see these following publications from ʿAbd al-Aziz al-Duri and Ursula Sezgin. SEZGIN, U. (1971) *Abū Miḫnaf: ein Beitrag zur Historiographie der umaiyadischen Zeit* (Leiden: Brill, 1971); DURI, A. A. (1983) *The Rise of Historical Writing Among the Arabs* (Princeton: Princeton University Press) 43–5.

[39] AL-ṬABARĪ Secunda Series (1964) 655.

[40] AL-YAʿQŪBĪ (1892) 311; DJAIT, H. (1986) *Al-Kufa, Naissance de la ville islamique* (Paris: Maisonneuve et Larose) 274–7.

the rule of Hishām b. ʿAbd al-Malik can be trusted, the initiative to reap significant financial benefits may well have been a later norm that conditioned the geographer's reading of past practice.

Caliph Hishām's interest for the urban economy also manifests in his patronage of several commercial facilities that bore his name, in Ḥimṣ, Ruṣāfa, and al-Raqqa. A series of shops in Ḥimṣ was constructed near the Rastan Gate, which became toponymically known as *sūq Hishām*. Its foundation is reported in the ninth-century collection of *ḥadīth* from Nu'aym b. Hammad, who relies on the contemporary account of ʿAbd al-Salām b. Marwān. The account of this early-eighth-century theologian of Ḥimṣ would have been transmitted by the traditionalists Safwān al-Saqsaqī (d. 772) and Abū Bakr b. Abī Maryam (d. 773). It indicates that there originally existed a marketplace near Rastan Gate. However, in the reign of Yazīd II (720–24), this old marketplace was destroyed during a fight between the tribes of Qudā'a and Himyar. Yazīd II's successor, Hishām b. ʿAbd al-Malik (724–43) had the market rebuilt, which exemplifies the extraordinary concerns the caliph had for the promotion of trade and production through the construction of economic amenities.[41]

In al-Ruṣāfa, Hishām's investments in trade and production generated the economic growth of the previously militarized borderland of the Middle Euphrates Valley, where late antique settlements defended the frontier between Romans and Sasanians before the rise of Islam. The thirteenth-century geographer Yāqūt[42] provides an interesting testimony about al-Ruṣāfa (fig. 2.3), based on the lost ninth-century account of al-Aṣmaʿī[43] who himself reported the words of a contemporary witness from the first half of the eighth century. Reportedly, the establishment of Hishām b. ʿAbd al-Malik in al-Ruṣāfa favoured the development of the Christian city, which was provided with a new market (*sūq*) including several shops (*dukkan*), traces of which have been archaeologically discovered alongside the Cathedral (figs. 2.4 and 2.5).[44] Al-Aṣmaʿī mentions that al-Ruṣāfa's population included many merchants, which suggests that the foundation of this new marketplace was very likely a contributing factor in the evolution of the city from an important late antique military and Christian religious hub to a major centre of trade from the middle of the eighth century to the ninth century. At the same time, Caliph Hishām founded a market, called *sūq al-ʿAtīk*, which was built in the nearby late Roman town of Kallinicos. Although the Umayyads' interest in al-Ruṣāfa and Raqqa originally responded to the political desire to control and subject

[41] MADELUNG, W. (1986) 'Apocalyptic Prophecies in Ḥimṣ in the Umayyad Age', *Journal of Semitic Studies* 31(2): 141–85.

[42] YĀQŪT (1957) *Muʿǧam al-buldān* 3 (Beirut: Dār Ṣādir) 47–8.

[43] See the discussion on Yāqūt's sources in SHAHID, I. [1995] (2002) *Byzantium and the Arabs in the Sixth Century* (Washington DC: Dumbarton Oaks) 342.

[44] ULBERT, T. (1992) 'Beobachtungen im Westhofbereich der Basilika von Resafa', *DamMitt* 6: 403.

the local Bedouin tribes, it ultimately contributed, over the course of a century, to the transformation of the East Syrian Steppe and the Middle Euphrates Valley into a key transit zone between Greater Syria and Iraq. Interestingly, Yāqūt specifies that in the eighth and ninth centuries the monitoring (*tasfir*) of trading ventures from Raqqa to Ḥimṣ became one of the principal sources of revenue for the Christian communities of Ruṣāfa.[45]

2. SOWING AND REAPING

While ʿAbbāsid caliphs perpetuated and consolidated this practice of investing in economic amenities, it also became a way to reap significant benefits. The custom of levying a ground rent on marketplaces and workshops was either directly adopted from the late Roman model[46] or reintroduced under the Umayyads, possibly following a short hiatus. The Muslim authorities thus captured the pay-offs of their initial investments in the urban economy by harvesting returns through rents, the proceeds of which could then of course be reinvested in further strategic projects, thereby creating a cycle of economic expansionism.

[45] The foundation of the new city of al-Rafīqa in 771, near Raqqa, during the caliphate of al-Manṣūr (754–75), most likely increased even further the strategic value of the region. Al-Mahdi (775–85) and the local governor ʿAlī b. Sulaymān had later Raqqa's marketplaces moved outside the city walls and clustered in a specialized economic quarter connecting Raqqa and al-Rafīqa, traces of which have been found in the modern neighbourhood of Mishlab. The history of al-Ruṣāfa, Raqqa, and al-Rafīqa in the eighth and ninth centuries provides here evidence of how an active imperial patronage of trade and production favoured the new economic development of an old frontier area. AL-BALĀḎURĪ (1866) 179. See also the extensive bibliography on Raqqa, in particular: MEINECKE, M., HEUSCH, J.-C. (1985) 'Grabungen im ʿabbāsidischen Palastareal von ar-Raqqa/ar-Rafiqa', *DamMitt* 2: 85–105; MEINECKE, M. (1995) 'Raqqa on the Euphrates: Recent Excavations at the Residence of Hārūn al-Rašīd', in S. Kerner (ed.) *The Near East in Antiquity* 2 (ʿAmmān) 17–32; ROBINSON, Ch. (2003) 'Ar-Raqqa in the Syriac Historical Tradition', in S. Heidemann (ed.) *Raqqa, Die Islamische Stadt*, 2 (Mainz: Von Zabern) 81–5; HEIDEMANN, S. (2006) 'The History of the Industrial and Commercial Area of ʿAbbāsid al-Raqqa, called al-Raqqa al-Muḥtariqa', *BSOAS* 69: 33–52; HENDERSON, J., CHALLIS, K., O'HARA, S., McLOUGHLIN, S., GARDNER, A., PRIESTNALL, G. (2002) 'The Raqqa Ancient Industry Project', *Antiquity* 76: 33–4.

[46] KISTER, M. J. 'The Market' 272–6. According to the Islamic traditionalist al-Samhūdī, this practice did not exist in Arabia in the early seventh century. The Islamic traditions explain that Prophet Muḥammad considered as inappropriate to generate a profit or request a tax from shopkeepers and craftspeople, and consequently freedom was given to merchants and artisans to determine the price of their commodities with no interference in their activities. Archaeological evidence tends to confirm that trade was indeed spontaneously conducted in the courtyard of households or in unbuilt esplanades. This suggests that in the eighth and ninth centuries, the late Umayyad and early ʿAbbāsid caliphs were most likely influenced by the Roman and Sasanian fiscal regime. AUBERT, J.-J. (2016) 'Law, Business Ventures and Trade', in *The Oxford Handbook of Roman Law and Society*, eds. C. Ando, K. Tuori, P. J. Du Plessis (Oxford: Oxford University Press) 621–34.

The lack of contemporary testimonies makes it difficult to establish whether the Umayyads adopted the usage of *ḍarībat al-aswāq* immediately. The ninth- and tenth-century literary accounts indicate that the Umayyad sovereigns received some sort of compensation from merchants already in the late seventh century.[47] However, this practice, if it existed at the time, is unlikely to have been very common and is even reported to have even been forbidden under the rule of Caliph ʿUmar II (717–20). It may be that ʿUmar II followed a practice instituted by Prophet Muḥammad who would not have imposed any taxes in Medina's marketplaces according to the Islamic tradition.[48] Where there is suggestion that the *ḍarībat al-aswāq* was operated in the late seventh century, it may well have been no more than a fabrication to suggest a precedent to conveniently establish it within the Islamic legal system from the caliphate of al-Manṣūr (754–75). In the late eighth century the rental of commercial facilities was indeed widely implemented, at the time when the land tax or *ḫarāǧ* would also have been clearly institutionalized as a rent on the conquered land, whose income should be used to benefit all Muslims. The term *ḫarāǧ* only appeared in Arabic papyri shortly after the ʿAbbāsid revolution.[49]

The major cities of Baghdad and Sāmarrā, in present-day Iraq, both offer further instances of how the authorities acted as organizing agents to develop these areas and rent the facilities. The foundation and early development of both cities are described in great detail by the ninth-century geographer al-Yaʿqūbī. Although he lived a century after Baghdad's initial construction, his description relies on contemporary accounts from his ancestor Wāḍiḥ, who at the time occupied a high position in the government. In his description of the round city, al-Yaʿqūbī notes that in 762 Caliph al-Manṣūr originally had shops built in the arcades (or *ṭāqāt*) along the ramparts of the city.[50] The prosperity of these outlying shops was short-lived, however, as they were definitively taken down in 774 for security reasons[51] and regrouped in the neighbourhood of al-Karḫ in the south-west of the city, between the Ṣarāt and ʿĪsā canals. This decision to turn al-Karḫ into the capital's commercial centre was probably deliberate, as an old pre-Islamic marketplace had taken up the site in the past.[52] An account from the ninth-century chronicle of al-Ṭabarī suggests how aware the caliph was of the economic rationale for selecting this site, which lay at the heart of a network of rivers and canals.[53] Again, the development of a mercantile neighbourhood seems to have resulted from a well-planned initiative of the sovereign. Al-Manṣūr organized the marketplace

[47] DURI, A. A. (2011) 169. [48] AL-BALĀḎURĪ (1866) 15.
[49] SIJPESTEIJN, P. M. (2013) 192.
[50] AL-ḪAṬĪB AL-BAĠDĀDĪ (1931) *Taʾrīḫ Baġdād* (Cairo) 80.
[51] AL-ḪAṬĪB AL-BAĠDĀDĪ (1931) 80–1.
[52] LASSNER, J. (1970) *The Topography of Baghdad in the Early Middle Ages* (Detroit: Wayne State University Press) 147–8.
[53] AL-ṬABARĪ Tertia Series (1964) 323–5.

so that the merchants would be regrouped into categories of specialized trade, each group being independent from the others, as indicated by al-Ḫātib al-Baġdādī and al-Yaʿqūbī's accounts.[54] The caliph also ordered the construction of marketplaces in each borough, and allotted them to family members and officers. In this way, Baghdad was provided with several commercial areas, some of which had their own identity because of their high degree of specialization. Al-Balāḏurī reports that most shops founded in the commercial quarter of al-Karḫ were rented to traders.[55] The shopkeepers did not have any property rights in the marketplaces. The facilities belonged to the caliph who received a ground rent. This rent was part of the *mustaġallāt* (revenue-generating properties). The tenth-century chronicle of al-Ṭabarī confirms these reports, while offering additional details. He mentions that the rent would have varied according to the size of each shop and location of the shopkeepers' premises by rivers, city walls, ports, or main thoroughfares, and that its yearly collection was still ongoing at the time of writing.[56] This confirms that premises were rented on a long-term basis. There is also a marked contrast with early medieval western Europe, where the sellers were bound to their overlords—typically an abbot, bishop, or landowner—by short-term contracts. Here, the sellers rented a certain space or a booth in the marketplace only for one market session.

While this process of collecting rent from shopkeepers became systematized from the late eighth century, the criteria for taxation may have evolved. Rents came to be assessed on the basis of the annual revenues of shopkeepers and craftspersons, and thus no longer depended on area occupied. Al-Baġdādī reveals that after the accession of al-Mahdī as caliph, the sovereign imposed a rent advised by Ibn ʿUbaydallāh b. Yāsar (d. 785/6), who was a scribe and a vizier, considered an expert on fiscal issues. Its implementation was supervised by Saʿīd al-Ḥarrašī from the years 783–4.[57] Although al-Mahdī did not establish the practice of imposing rent on merchants, as this was already occurring (according to al-Balāḏurī, al-Ṭabarī, and Yāqūt) under the reign of his father al-Manṣūr, al-Baġdādī possibly alludes to a modification in the way the authority derived revenue from marketplaces and their associated activities. Perhaps most notably, literary sources indicate that he undertook the reform of the system of land taxes in the region of the Sawād in southern Iraq.[58] The new taxation method seemed to contemporary commentators to be fairer, while also being regarded as more honest by the religious authorities and a more effective way for the imperial government to obtain higher revenues from traders selling high-value commodities that occupied little

[54] AL-ḪAṬĪB AL-BAĠDĀDĪ (1931) 61–2.
[55] AL-BALĀḎURĪ (1866) 295.
[56] AL-ṬABARĪ Secunda Series (1964) 324.
[57] AL-ḪAṬĪB AL-BAĠDĀDĪ (1931) 62.
[58] SOURDEL, D. (1959–60) *Le vizirat ʿAbbāside* 1 (Damascus: Institut Français) 96.

selling space.[59] The rents collected from marketplaces were reused to support the construction of mosques[60] (in order to enable the growing Muslim community to celebrate their rites), palaces, and to subsidize military and defensive urban works,[61] as well as the agricultural expansion of cities' hinterlands.

Yet, there is still a lack of certainty as to the extent that tax revenues were sufficient to offset the enormous costs of substantial urban development in ʿAbbāsid Iraq. The literary sources contain some statistical data related to the amount the government was making in rents. Although these numbers have to be cautiously accepted, they provide a basis for some considered supposition. During the caliphate of al-Manṣūr, the yearly rents from the city markets including the mill at Baghdad, a decade after the completion of the town, were reported at twelve million dirhams, according to al-Yaʿqūbī.[62] With these numbers, the ruling authority would appear to have made a solid return by recouping three times its original investment in the palace construction with a single year's revenue from the local economy, as the foundation of Baghdad, its mosque and marketplaces would have costed, according al-Ṭabarī, almost five million dirhams.[63] The rents supposedly remained a fundamental source of revenue for the authority. However, they did not necessarily entirely offset the cost of extensive construction in the late ninth and early tenth centuries. Describing Sāmarrā and its marketplaces under the caliphate of al-Muʿtaṣim (833–42), the ninth-century geographer al-Yaʿqūbī reveals that the enforcement there of a renting system, similar to that of Baghdad, enabled the imperial government to raise ten million dirhams.[64] Yet, under al-Mutawakkil's reign (847–61), that would have represented one fifth of the cost of the Ja'fari palace in Sāmarrā and perhaps one fortieth of the cost of all the caliph's projects. This provides enough evidence to infer that rents may not have been enough to cover large-scale infrastructure spending over the longer term.

Ground rent seems to have been the only tax collected on permanent urban marketplaces. By contrast, the late Roman and Sasanian tax on trade appears to have disappeared in early Islam, to survive only in the late Byzantine Empire.[65] The abolition of tax on merchandise purchased at town

[59] Al-Ǧāḥiẓ mentions the case of shopkeepers in Baṣra, who sub-rented to pedlars the front space of their shops to cover the cost of their own rents requested by the local governors in the early ninth century. AL-ǦĀḤIẒ (1951) *Kitāb al-buḫalā'*, trans. C. Pellat (Paris: Maisonneuve) 173.

[60] For instance, in early Islam, shop rents provided income for mosques and their personnel in Egypt. GROHMANN, A. (ed. and trans.) (1934–8) *Arabic Papyri in the Egyptian Library* 2 (Cairo) 87–8, no. 92.

[61] AL-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 311; DJAÏT, H. (1986) 274–7.

[62] AL-YAʿQŪBĪ (1892) 254. [63] AL-ṬABARĪ, Tertia Series, 1 (1964) 326.

[64] AL-YAʿQŪBĪ (1892) 263.

[65] MORRISSON, C., LAIOU, A. E. (2007) *The Byzantine Economy*, coll. Cambridge Medieval Textbooks (Cambridge: Cambridge University Press) 52.

marketplaces did not, however, come out of the blue. This measure was adopted in the context of the redesigning of the pre-existing tax regime and the significant changes in the fiscal system throughout the eighth century, which is widely recorded in contemporary papyri.[66] The eighth-century papyri indicate an evolution in tax rates (sometimes leading to local popular unrest),[67] changes in the nature of the tax levied, and a replacement of ecclesiastical with secular fiscal officers. The redesign of the tax system away from taxing transactions may well have been influenced by the Islamic traditions according to which Prophet Muḥammad would have forbidden the levy of taxes on merchants in early Islamic Medina.[68] However, it should be noted that the suppression of this tax on merchandise had a precedent under the Sasanians. Indeed, the Kārnāmag ī Ardašīr[69] refers to the revocation of taxes on market transactions within the Sasanian wāzār. The text is a product of the late Sasanian court, datable to the sixth or early seventh centuries, and, in attributing acts to the first Sasanian king of kings in the third century, possesses a constitutional function. It possibly suggests an institutional precedent to the light fiscal regime policy that the caliphate widely implemented a century later.

The abolition of tax on merchandise purchased at town marketplaces may have occurred for practical reasons. The disappearance of the guilds, with their leaders collecting the tax from the corporation's membership on behalf of the ruling authorities, may have meant the loss of an easy and cheap means of tax collecting. However, it may also suggest a careful awareness, on the part of the new Muslim rulers, of the economic importance such fiscal measures had in reducing transaction costs and establishing conditions conducive to the increase of the volume of trade.

3. EXERCISE AND ASSERTION OF POWER

In late antique and medieval urban settlements, the sponsorship of workshops and shops not only had economic implications for the Arab-Muslim elites, it also, indirectly, carried an ideological significance in the eighth and ninth centuries. Marketplaces, as areas of popular gathering, gained in particular a key importance in communicating Islamic imperial agenda. Inscriptions and toponyms were used to write an official view of the Muslim policy onto the

[66] O'SULLIVAN, S. (2014) 'Fiscal Evidence from the Nessana papyri', in P. Sijpesteijn (ed.) *Documents and the History of the Early Islamic World* (Leiden: Brill) 50–74.

[67] O'SULLIVAN, S. (2014) 50–74.

[68] KISTER, M. J. (1965) 'The Market of the Prophet', *JESHO* 8: 272–6.

[69] GRENET, F. (2003) *La Geste d'Ardashir fils de Pābag. Kārnāmag ī Ardaxšēr ī Pābagān* (Die).

landscape, as well as to act as everyday symbols to reinforce the image of the Islamic authority and encourage the allegiance of the people.

Echoing the inscriptions of foundation present in mosques,[70] textual and archaeological sources indicate how the construction or refurbishment of a market resulted in the Umayyad and early ʿAbbāsid caliphs ordering an engraving dating the work and mentioning the name of the sovereign and sometimes his local governor, such as in Baysān.[71] This indirectly reminded the people of the benevolence of the sovereign and quite possibly encouraged them to learn the Arabic script.

The use of marketplaces in the process of asserting Muslim imperial power in the eighth and ninth centuries is also perceptible in their toponyms. It became customary under the Umayyads and early ʿAbbāsids to rename a *sūq*, as an archway[72] or a street,[73] after a prince or princess, to celebrate a birth or a coronation. This was the case of the Sūq Umm Ḥakīm in Damascus, near Bāb farādīs. This pre-Islamic marketplace, which was still in use during the lifetime of the historian Ibn ʿAsākir in the twelfth century, was originally renamed after Umm Ḥakīm, in tribute to Umayyad Caliph Hishām b. ʿAbd al-Malik's wife, after the birth of Prince Yazīd b. Hishām al-Afqam.[74] The *sūq* was thus renamed as a way to advertise the existence of a new member of the imperial family.

Under ʿAbbāsid rule, this process of exploiting marketplaces for propaganda developed even further with the rise of a class of military and imperial officials. Marketplaces were continuously named after princes,[75] but could henceforth also bear the name of prominent military families that participated in the ʿAbbāsid revolution and the consolidation of ʿAbbāsid power.[76] In addition, markets in Baghdad and Sāmarrā were now named after loyal viziers and non-Arab clients or *mawālī*, who encouraged the economic growth of the cities. Al-Ḫaṭīb al-Baġdādī indicates that these toponyms did not necessarily

[70] For instance, when the principal mosque of Baghdad, originally built under the reign of al-Manṣūr near his palace (Qaṣr al-Ḏahab), was rebuilt, Caliph Hārūn al-Rašīd ordered that an inscription be engraved featuring his name, together with his order for its reconstruction, the name of the architect and carpenter, and the date. AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 108.

[71] See above.

[72] Like the archway (*ṭāq*) of Asmā', the daughter of al-Manṣūr in Baghdad in the east side. AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 93.

[73] See the *shāri'* named after princes, princesses, and clients (*mawālī*) in eighth- and ninth-century Baghdad and Damascus, according to al-Yaʿqūbī. AL-YAʿQŪBĪ (1892) 240–1.

[74] IBN ʿASĀKIR (1959) *Tārīḫ madīnat Dimašq*, trans. N. Elisséeff 'La description de Damas d'Ibn ʿAsākir' (Damascus) 72, 123, 125, 269, 270.

[75] AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 95. For instance, the *suwayqah* al-ʿAbbāsah on the east side of Baghdad was named after al-ʿAbbās b. Muḥammad b. ʿAlī b. ʿAbdallāh b. ʿAbbās, the brother of Abū Ja'far al-Manṣūr. This *suwayqah* as well as a palace was allocated to him after his major contribution in the economic development of the west side of Baghdad.

[76] AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 93. In the east side of Baghdad, a *suwayqah* was named after Naṣr b. Malik b. al-Hayṯam al-Ḫuza'ī, who was Saḥib al-Šurta to al-Mahdī until his death in 777/8, and a member of the famous military family of Malik b. al-Hayṯam al-Ḫuza'ī.

imply a status of ownership. In most cases, they were simply given to streets, bridges, or marketplaces near the residence of a high dignitary.[77] They were used as a mark of favour that caliphs distributed to the most worthy army and court officials, regardless of their ethnic identity. Indirectly, this displayed the ʿAbbāsid ideology of reorganizing the Islamic society on a wider basis after 750 and acknowledging the integration of both Arabs and non-Arabs into the new regime. In Baghdad, one can draw from the sources, for instance, in the east side of the city, the presence of the Khān of Abū Ziyād, who was a Nabaṭī *mawlā* during the reign of al-Manṣūr[78] and the Suwayqat of Ḥağğāğ al-Waṣīf, a client of al-Mahdī.[79] In Sāmarrā, a little marketplace or *suwayqat* bore the name of Masrūr, who was most likely Masrūr al-Balẖī, the *mawlā* in charge of the administration of the palace during the short reign of al-Muhtadī in 870.[80]

Changing market toponyms could be used to acknowledge social promotion within the government but also exclusion. For instance, after the powerful Persian Barmakids gave a major impetus to the urbanization of the east bank of the Tigris and the development of the quarters of Ruṣāfa, Šammasiya, and Muẖarrim in Baghdad, they were granted fiefs, and the local markets attached to their estates were marked with their names such as Sūq Jaʿfar and Sūq Yaḥyā b. H̱ālid al-Barmaki.[81] After the disgrace of the family in 803, the Sūq Yaḥyā was renamed Sūq Umm Jaʿfar (Zubaydah) after the princess and wife of Caliph Hārūn al-Rašīd.[82] Later, after the civil war between al-Ma'mūn and al-Amīn in 809–13, the *sūq* was once again renamed after Tahir b. al-Ḥusayn, the Iranian general who served under al-Ma'mūn and led the armies that would defeat his brother. The naming of marketplaces was thus used both to honour contemporary figures hailed for worthy accomplishment and to publicly acknowledge their disgrace. Nomenclature, always subject to editing and reallocation, served to announce significant changes in the administrative hierarchy to residents and visitors; names from old viziers disappeared to present a revised version of history.

Under early ʿAbbāsid rule, the patronage of urban economy did not only aim to display the Islamic imperial propaganda, but also to bind together an increasingly diffuse and powerful class of bureaucrats and military families. In the late eighth and ninth centuries, caliphs began to allocate these families privileges, market revenues, and lands.[83] In the textual sources, the emphasis is

[77] AL-H̱AṬĪB AL-BAĠDĀDĪ, 1 (1931) 98. AL-YAʿQŪBĪ (1892) 246.
[78] AL-H̱AṬĪB AL-BAĠDĀDĪ, 1 (1931) 95.
[79] AL-H̱AṬĪB AL-BAĠDĀDĪ, 1 (1931) 96.
[80] AL-ṬABARĪ, Tertia Series (1964) 1821.
[81] AL-ṬABARĪ, Tertia Series (1964) 367, 846.
[82] AL-H̱AṬĪB AL-BAĠDĀDĪ, 1 (1931) 93.
[83] GORDON, M. (1999) 'The Turkish Offices of Sāmarrā: Revenue and the Exercise of authority', *JESHO* 42(4): 467; KENNEDY, H. [2004b] (2016) *The Prophet and the Age of the Caliphates* (London: Routledge) 190; WAINES, D. (1977) 'The Third Century Internal Crisis of the Abbasids', *JESHO* 20(3): 286–306.

put on the narrative of rewarding. There is commonly indication of what was being rewarded and the circumstances by which lands and markets were granted. We know, for instance, that in 763, al-Manṣūr granted ʿAbd al-Wahhāb b. Ibrāhīm al-Imām, the nephew of Caliph al-Saffāḥ and governor of the province of Damascus, a small market or *suwayqah* situated on the Lower Ṣarāt opposite the Kūfa gate in Baghdad. Part of a larger estate including a palace,[84] the market was allocated after he conducted successful campaigns into Byzantine territory in 757, 759, and 769.[85] Al-Ḫaṭīb al-Baġdādī also reports, on the basis of the contemporary account of Abū Zayd al-Ḫaṭīb, that Sūq Šahār in Baghdad was gifted by al-Manṣūr to the army leader al-Hayṯam b. Muʿāwiyah in 772–3, after he captured ʿAmr b. Shaddād, an ʿAlid rebel in Fārs.[86] Al-Yaʿqūbī describes Sūq Šahār as a large market next to luxurious residences and side streets (*sikkah*) between the Kūfa and Damascus Gates.[87] The *sūq* was granted to reward the military achievement and loyalty of al-Hayṯam.

By contrast little evidence has survived on the legal framework, obligations, and regulations associated with these endowments. It is also unknown the extent to which these gifts were made public and whether an official ceremony took place. Nevertheless, the sources do suggest that it was not until the reign of al-Mahdī (775–85) that this process was fully developed. This was at a time when non-Arab bureaucrats (*kātib*) and chamberlains (*ḥāǧib*) became an important force in the ʿAbbāsid caliphate, and the sovereign embarked upon a policy to ease the tensions between the ruling house, the civilian bureaucracy, and the military.[88] Al-Mahdī and his successors began to bestow rights on military officials and bureaucrats to collect revenues from marketplaces.[89] The imperial officials therefore appeared in most cases not to have a claim over the built environment of the market, ownership of which was retained by the caliphate. However, this system gave them the opportunity to collect rents from shopkeepers for the space they occupied within imperially-owned facilities, as suggested by the chronicles of al-Ṭabarī. It is said that when al-Mahdī granted the military commander (*naqīb*), Naṣr b. Mālik b. Hayṯam al-Ḫuzāʾī, the market (*suwayqat*) near the al-Mahdī channel in Baghdad, this latter significantly increased his income. Naṣr b. Mālik b. Hayṯam al-Ḫuzāʾī

[84] AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 86.

[85] AL-YAʿQŪBĪ (1892) 242. Interestingly, al-Yaʿqūbī reports that ʿAbd al-Wahhāb's palace was in ruins and the *suwayqah* no longer standing at the end of the ninth century. This confirms the ephemeral status of the grant, that ʿAbd al-Wahhāb could not pass on to his son Ibrāhīm before dying in 774 or 775.

[86] AL-ṬABARĪ, Tertia Series, 1 (1964) 378.

[87] AL-YAʿQŪBĪ (1892) 247.

[88] LASSNER, J. (1980) *The Shaping of ʿAbbāsid Rule* (Princeton: Princeton University Press) 88, 92–3.

[89] Indirectly, this confirms that it was not until the caliphate of al-Mahdī that rents were systematically levied on shops and crafts. LASSNER, J. (1980) 234.

certainly did not have any direct authority over the market in the way European lords who lived on their estates had jurisdiction over them.[90] Nevertheless, it increased his political importance and conferred upon him the prestige and respect accorded by the Caliph, as well as binding him to the regime.

In the case of food production facilities, most notably grain mills, this paradigm whereby officials were granted the proceeds of grain sales was also followed, but they did not have any claim to the buildings, equipment, or the land on which it was operating. The history of the mills named after Ṭārāṯ b. al-Layṯ b. al-ʿAyzār b. Ṭarīf, a Byzantine Patrikios in Baghdad during the reign of al-Mahdī, exemplifies this process. Al-H̱aṭīb al-Baġdādī reports, from contemporary accounts, that the Patrikios, who was a Byzantine diplomat at the ʿAbbāsid court, managed to convince the caliph to invest half a million dirhams in the foundation of several mills at the junction of the Greater and Lesser Ṣarāt on the eastern tip of al-ʿAbbāsiyah in Baghdad.[91] It appears that this investment was very lucrative and al-Mahdī rewarded the Patrikios for his initiative by granting him a part of the proceeds of the mills. The motive for al-Mahdī's generosity may well have been to curry diplomatic favour with Byzantium. The return of the Patrikios to the Byzantine court after several years did not put an end to this arrangement, which continued until his death. One might speculate that the history of the Patrikios and the origins of the mills are a fabrication to portray the generosity of the caliph and his ability to determine a good investment. It is contradicted by al-Ṭabarī, according to whom the mills dated from times previous to the ʿAbbāsids and were the work of Nestorian Christians.[92] However, even if it is an invented account, al-H̱aṭīb al-Baġdādī is most likely to have drawn from contemporary practices to provide a stylized or allegorical account which is little or no less informative.

The history of the Patrikios shows that the granting of these revenues was specific to the individual for their lifetime and was not transferable or heritable. This is confirmed in several accounts, indicating that the estates were taken back by the ʿAbbāsid caliphs and reallocated after the death of the holder, as happened for the *sūq* Abū al-Ward. This particular *sūq* situated in al-Karẖ, the commercial quarter of Baghdad, was originally allocated to ʿĪsā b. ʿAbd al-Raḥmān, known as Abū al-Ward while he served al-Manṣūr, and then transferred by al-Mahdī to a certain ʿUmar b. al-Muṭarrif al-Marwazī. The revenues of this market were offered to al-Marwazī after his promotion to president of the Maẓālim Courts. These courts were tribunals of administrative law where the public directly appealed against the abuse of, or failure to

[90] ISSAWI, C. (2005) *An Economic History of the Middle East and North Africa* (Abingdon: Taylor & Francis) 137.

[91] AL-H̱AṬĪB AL-BAĠDĀDĪ, 1 (1931) 91–2; AL-YAʿQŪBĪ (1892) 243; YĀQŪT, 2 (Dār Ṣādir, Beirut, 1957) 760.

[92] LE STRANGE, G. (1900) *Baghdad during the Abbasid Caliphate* (London: Oxford University Press) 143–5.

exercise, power by other authorities, as well as against decisions made by judges.[93]

Another interesting testimony, one that illustrates the non-heritable status of these grants, concerns *suwayqah Ghālib* on the west side of Baghdad near the junction of the Karkhāya and the Nahr al-Daǧǧāǧ. This marketplace was built by the *mawlā* al-Rabīʿ b. Yūnus, who served as a chamberlain (*ḥāǧib*),[94] on an estate that Caliph al-Manṣūr (754–75) allocated him in the quarter of Bayn al-Sūrayn, which was a densely populated area of al-Karẖ. When al-Mahdī became caliph (775–85) and moved the government to al-Ruṣāfa, the leading figures of the regime also relocated to the east side, al-Rabīʿ b. Yūnus among them. After moving to the east side, al-Rabīʿ converted his western holdings into a marketplace[95] in order to secure a rental income. Al-Mahdī granted him the right to collect revenue from the local shopkeepers. This right was awarded for service rendered as palace servant and could not be transferred to his son, al-Faḍl. After the death of al-Rabīʿ, the marketplace was sold to the shopkeepers, most likely because its maintenance was no longer profitable.[96] During the formative period of Islam, the imperial authority therefore benefited extensively from the development of urban retailing and crafts from a political and ideological perspective. As early as the late seventh and early eighth centuries, the Umayyads seem to have used the economy to promulgate and infuse their religio-political ideology into a predominantly non-Muslim society. In 750, the ʿAbbāsid revolution generated significant changes in the existing social order. Under the early ʿAbbāsids, the patronage of urban economy and granting of market revenues became part of a political manoeuvre to bind an increasingly diffuse ruling society by special ties.

After 700, the increasing investment of caliphs and governors in urban retailing and crafts played a role in keeping marketplaces a permanent feature of Greater Syrian and Iraqi cities. This certainly contrasted with early medieval Christendom in that trade mostly took place in the form of weekly rural markets.[97] These markets were markedly different to those found in the Levant and Iraq, which developed more organically to cater to local needs. In most areas of Carolingian Europe, with a few exceptions notably in Italy, they grew out of the local initiative of monasteries or aristocratic families,[98] in contradistinction to the marketplaces in early Islam, which were institutions sponsored by caliphs and governors. In this way growing imperial investment

[93] AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 87–8.
[94] IBN ḪALLIKAN (1843) *Biographical Dictionary* 1–4, trans. De Slane (Paris) 521.
[95] AL-YAʿQŪBĪ (1892) 246. [96] AL-ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 88.
[97] VERHULST, A. (2002) *The Carolingian Economy* (Cambridge: Cambridge University Press) 90–1.
[98] COSTAMBEYS, M., INNES, M., MACLEAN, S. (2011) *The Carolingian World* (Cambridge: Cambridge University Press) 353–75.

represented a benign and necessary factor in the economic development of the Near East from 700.

While the growing involvement of caliphs and governors in cities' economy constituted a departure from late antiquity, the ʿAbbāsid's practice of sponsoring market- and craftplaces with the intention of generating a ground rent was adopted from the Roman and late Roman model. Taxes on trade were certainly abolished, but the collection of ground rent standardized a common practice to sustain urban development in the Near East. Inspired by their Roman predecessors (for instance, trade tax revenues gathered from the portico in the Baths of Zeuxippus at Constantinople were used to fund street lighting in the fifth century), the ʿAbbāsids reused the rents collected to support urban development in Iraq. When the populations of London and Paris were in the thousands, the return of investment of the ʿAbbāsids in crafts and retailing supported the rise of Iraqi cities, such as Kūfa, Baṣra, and Baghdad, whose population in the ninth century of about half a million or even more may have rivalled the megacities of the Roman Empire in the first to third centuries.[99]

[99] HANSON, J. W. (2016) *An Urban Geography of the Roman World, 100 B.C. to A.D. 300* (Oxford: Archaeopress).



Fig. 2.1 Baysān: detail of the Umayyad marketplace of Silvanus Street. (© F. Bessard)

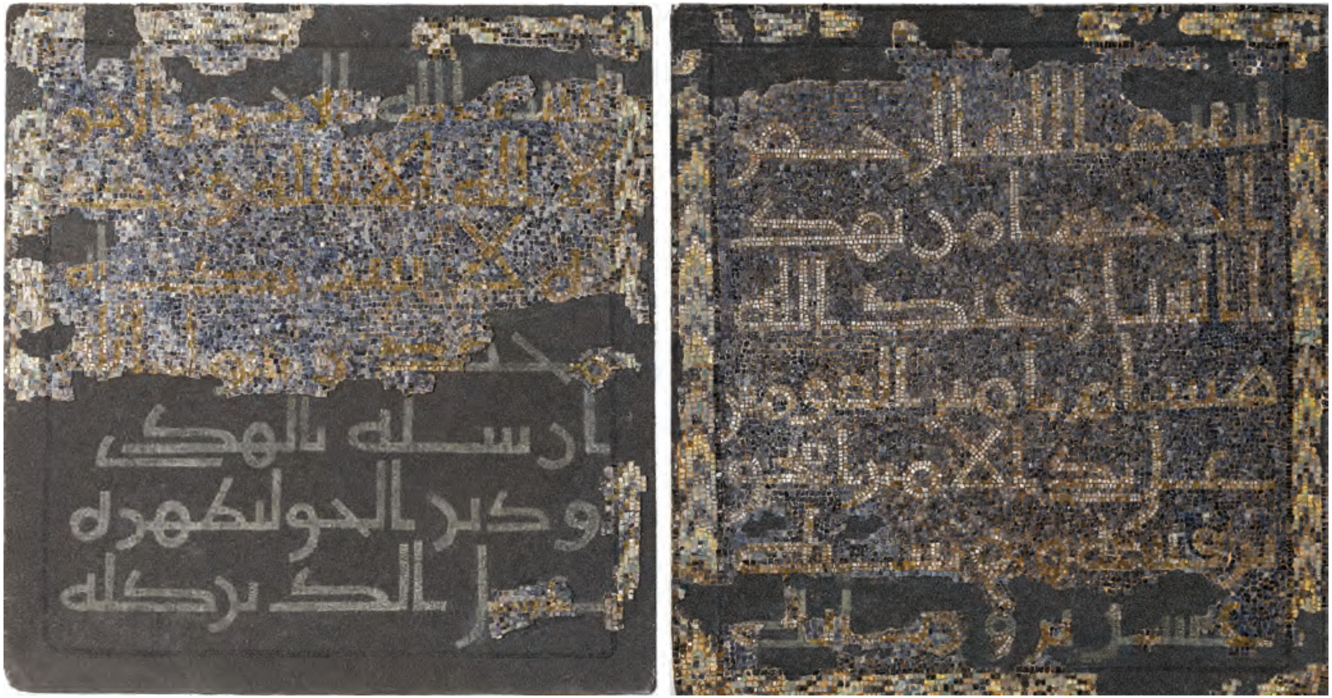


Fig. 2.2 Baysān: inscriptions on top of the monumental entrance of the Umayyad marketplace of Silvanus Street. The inscriptions commemorate its foundation following an order given by Umayyad caliph Hishām b. ʿAbd al-Malik (724–43) and the governor Isḥāq b. Qabīṣa. (Collection the Israel Antiquities Authority. Photo © The Israel Museum, Jerusalem by Meidad Suchowolski)



Fig. 2.3 Ruṣāfa: aerial view of Ruṣāfa. (© archive Ifpo Damascus)



Fig. 2.4 Aerial view of the cathedral next to which a mosque (north) and a market (west) were built under the Umayyads. (© archive Ifpo Damascus)

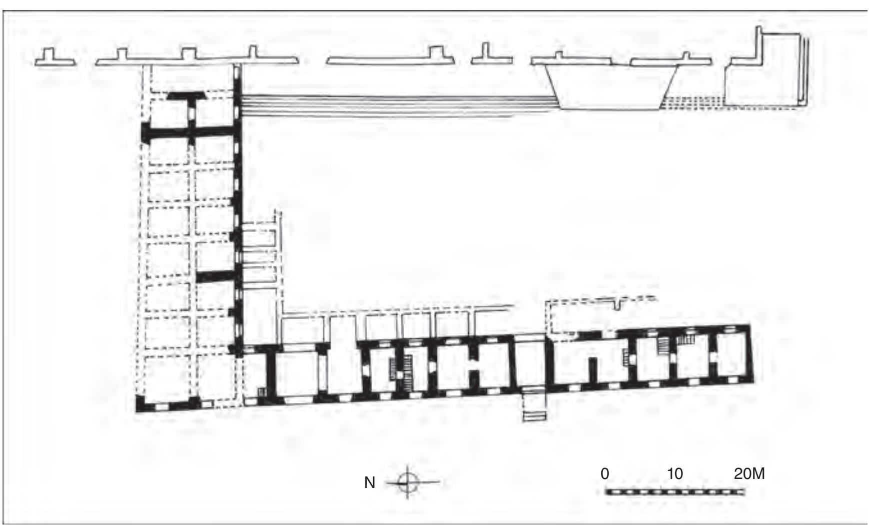


Fig. 2.5 Ruṣāfa: general plan of the Umayyad *sūq* of Ruṣāfa built against the western side of the cathedral. (T. Ulbert 1992)

3

New Perspectives on Urban Economic Planning

Late-twentieth-century scholarship on early Islamic economic life and the urban landscape in the Near East generally focused on the Umayyad Levant up to 750. Scholars emphasized the physical interaction of early medieval crafts and trade with the orthogonal planning of the Roman cities and 'classical' urban environment. Rebecca Foote[1] and Alan Walmsley[2] demonstrated that the development of production and retail did not alter the rectilinear urban planning of Roman cities and therefore could not be interpreted as a 'ruralization' of pre-Islamic towns after the Arab conquest of the Levant. Researchers have also used the long-term approach to reveal that this economic growth happened in cities that were no longer defined by a Roman identity. The reuse of Roman structures to establish new shops and workshops was the spontaneous continuation of a Byzantine practice of using spolia, converting pagan temples into churches (the Nabatean-Roman temple at Darih,[3] the Dusares-Dionysus temple in Jarash[4]), or shops encroaching over the stylobate of the street colonnade.[5] Commercial and industrial expansion in early Islamic cities was part of a long-term change of the Roman city that began in 330 after the expansion of Christianity under Constantine (307–37)[6]

[1] FOOTE, R. (2000) 'Commerce, Industrial Expansion and Orthogonal Planning: Mutually Compatible Terms in Settlements of Bilad al-Sham During the Umayyad Period', *Mediterranean Archaeology* 13: 25–38.

[2] WALMSLEY, A. (2000b) 'The Islamic City: the Archaeological Experience in Jordan', *Mediterranean Archaeology* 13: 1–9.

[3] MUHEISEN, Z., VILLENEUVE, F. (1994) 'Découvertes nouvelles à Khirbet edh-Darih (Jordanie) 1991–1994: autour du sanctuaire Nabatéan et Romain', *CRAI* 138(3): 735–57; (1997) 'Khirbet edh-Darih', *AJA* 101: 531–2.

[4] C. H. KRAELING (ed.) (1938) *Gerasa, City of the Decapolis* (New Haven: American Schools of Oriental Research) 37–63.

[5] WILSON, A. (2004) 'Cyrenaica and the Late Antique Economy', *Ancient West and East* 3(1): 146.

[6] KENNEDY, H. (1985) 'From Polis to Madina: Urban Change in Late Antique and Early Islamic Syria', *Past and Present* 106: 3–27.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020). © Fanny Bessard.
DOI: 10.1093/oso/9780198855828.001.0001

and continued with the Persian destruction of northern Levant in Antioch and Apamea between 540 and 610.[7]

In focusing on continuity and change in 'human spatiality'[8] and urban economic topography in relation to an Islamic ideology asserting itself between 700 and the tenth century, I intend to shift the emphasis of research away from an arid architectural approach. In the context of expanding imperial patronage of urban shops and workshops in Near Eastern and Central Asian cities from 700 to 950, as well as the development of Islamic law, one may wonder whether the distribution of working areas within the cityscape remained similar to the Roman-Byzantine and Sasanian model or whether it evolved independently. Relatedly, if there was a change, was the pattern of evolution similar from the Levant to Transoxiana, despite a differing pre-Islamic heritage? With an awareness of the broader ideological context, we might also ask whether Islamic moral and legal codes dictated the location of economic activities.

From 700, the greater involvement of the Muslim imperial elite in the patronage of urban retailing and crafts contributed to a redefinition of the topography of late antique and early medieval settlements from the Near East to Central Asia. The model of clustering productive and trading activities, which can be seen in its infancy in the Roman world in Pompeii, Sabratha, Tyritake, and Chersonese,[9] was expanded and became the norm in early Islam. This model evolved from simple communal working areas integrated in the urban fabric before 750 in the Levant to solely economic *rabaḍ* relocated outside the city walls in the ninth and tenth centuries in Iraq, Sogdia, and Farġāna. It will be established that, under the rule of the early ʿAbbāsids, this clustering of economic activities was favoured by a change in the location of the civic power. Initially settled within the city walls in the *dār al-imāra* amongst the population, from 835 until 1076 the ruling classes initiated a deliberate policy of isolation from the life of the masses by moving into palatial cities (Sāmarrā, Cairo, Rāfiqa), or by relocating the population and its activities in suburban areas, in order to protect themselves from rebellion. This universal shift allowed the Muslim imperial elite to further congregate craftsmen and merchants; the authorities developing a greater legal and fiscal grasp on economic practices. Industries and marketplaces became increasingly significant sources of revenue for the authorities, which no longer derived their wealth solely from landownership.

[7] FOSS, C. (1997) 'Syria in transition. An archaeological Approach', *DOP* 51: 189–269.

[8] LAVAN, L. (2003) 'Late Antique Urban Topography: from Architecture to Human Space', in L. Lavan, W. Bowden (eds.) *Theory and Practice in Late Antique Archaeology* (Leiden: Brill) 171–95.

[9] WILSON, A. (2002) 'Urban production in the Roman world: the view from North Africa', *Papers of the British School at Rome* LXX: 231–73.

1. GROWTH OF COMMUNAL WORKING AREAS IN THE LEVANT (700–50)

From 700 to 750, the Islamic Empire resulting from the Muslim conquests began to develop a cohesive political identity. In spite of the Arabization of the state apparatus, there was a general continuity between late antiquity and the decline of the Umayyad dynasty in 750. Within an essentially Christian area, the Muslims expressed a strong desire for coexistence and assertion of power. These desires manifested themselves in a process of acculturation and the construction of politico-religious headquarters in the heart of new and late Roman cities (Damascus,[10] Ruṣāfa,[11] Tiberias[12]), in a visible demonstration of their supremacy. Exercise of power remained intramural and took place in the *dār al-imāra* where the governors had settled and treasures were stored. Raised galleries linked these *dār al-imāra* to mosques, in order that caliphs could benefit from the prayers of the faithful.

Within cities evolving to respond to a new cultural model, from the early eighth century the location of economic activities changed in response to a desire for more efficiency. The Arab policy of maintaining a strong social cohesion between local populations and the new aristocracy explains the continued integration of working areas within the cityscapes in the Levant. However, the unsystematic locations of production and trade, inherited from the Roman past, from the heart of the *atria* of private houses, to street frontage *tabernae* and industrial quarters, was not perpetuated after 700. Although small markets providing for daily needs remained among residential areas, the Arab-Muslims adopted and systematized the organic process of clustering production and retail visible in its infancy in the Roman world.[13] Evidence suggests that Roman economic clusters developed on an ad hoc basis most likely for purely practical reasons, as Penelope Goodman confirms.[14] She argues that the distribution of urban workshops in the high-imperial era did not follow any planned pattern influenced by state control or concerns for

[10] SHBOUL, A. (1994) 'Change and Continuity in Early Islamic Damascus', *ARAM* 6: 67–102.

[11] KEY FOWDEN, E. (2000) 'An Arab Building at al-Ruṣāfa-Sergiopolis', *DamMitt* 12: 303–24.

[12] CYTRYN-SILVERMAN, K. (2009) 'The Umayyad Mosque of Tiberias', *Muqarnas* XXVI: 37–61.

[13] See the articles of P. Goodman and K. Droß-Krüpe on the issue of economic clustering in Roman cities, which remains largely debated. From evidence collected in Pompeii, Timgad, and Silchester, Goodman argues that clustering was not uncommon in Roman cities, while Droß-Krüpe is more cautious. GOODMAN, P. (2016) 'Working Together: Clusters of Artisans in the Roman city', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 301–33; DROß-KRÜPE, K. (2016) 'Spatial Concentration and Dispersal of Roman Textile Crafts', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 334–51.

[14] GOODMAN, P. (2016) 301–33.

pollution. After the rise of Islam, the systematization of this Roman and late antique practice across the caliphate illustrated the codification and control of a phenomenon already there in practice.

In the late Roman cities of Greater Syria, where individual workshops were scattered throughout the urban fabric, collective artisanal hubs flourished after the rise of Islam within the city walls, albeit close to the gates due to the pollution they produced. These economic hubs were set up in abandoned Roman buildings (such as hippodromes, temples, theatres, or baths), originally the sites of worship or recreation, which were thus privatized and transformed to take on new economic functions, and in this way the Arabs made use of the ancient heritage. The Roman buildings taken over by the craft industry provided all the stone necessary for building kilns and basins. Artisans also stripped out whole expanses of walls among the Roman remains to ensure the stability and insulation of their equipment.

This process of clustering artisanal activities progressively became the norm across the Levant from the end of the seventh century, as evident in Jarash, Baysān, and Apamea. Jarash is a provincial town, situated to the north-east of Jabal al-Sawād in the Balqā', on the routes leading to 'Ammān,[15] Pella (Tabaqat Faḥl),[16] and Adraa (Deraa) (fig. 3.1).[17] In 636, the Arab-Muslims conquered the city and changed its political status. Once attached to the Roman province of Arabia, Jarash became the seat of local government, in the military province of al-Urdunn.[18] Without any violent episodes being reported, the end of the seventh century and the early eighth century were marked by continued activity and a change in traditional economic workings until the earthquake of 749.

In late antiquity, according to epigraphic evidence, wealth was based on the small-scale marketing of crops grown just outside the walls of Jarash and on pottery production, dyeing, and weaving.[19] Archaeological remains suggest that these crafts, outside the family sphere, were distributed in the city space. With the exception of shops along the northern cardo, carpenters were established between the Temple of Zeus and the southern gate as early as

[15] SEIGNE, J., AUGUSTA-BOULAROT, S. (1998) 'Milliaires anciens et nouveaux de Gerasa', in *Mélanges de l'école française de Rome. Antiquité* 110(1): 261–95; RASSON-SEIGNE, A.-M., SEIGNE, J. (1995) 'Notes préliminaires à l'étude de la voie romaine Gerasa/Philadelphia', *ADAJ* 39: 193–210.

[16] SMITH, R. H., MACNICOLL, A. W. (1992) 'The Milestones of Mugharat al-Halas', in Pella in Jordan 2. The Second Interim Report of the Joint University of Sydney and the College of Wooster Excavations at Pella 1982–5 (Canberra: Australian National Gallery) 122–4.

[17] SEIGNE, J., AUGUSTA-BOULAROT, S., MUJJALI, A. (1998) 'Un nouveau gouverneur d'Arabie sur un milliaire inédit de la voie Gerasa/Adraa', in *Mélanges de l'école française de Rome. Antiquité* 110(1): 243–60.

[18] YĀQŪT (1957), *Mu'ǧam al-buldān* (Beirut: Dār Ṣādir) 127.

[19] GATIER, P.-L. (1985) 'Nouvelles inscriptions de Gerasa', *Syria* 62 (3–4): 297–312.

the third century.[20] From the fourth century, potters were also settled along the eastern side of the hippodrome and on the west side of the Church of St Theodore.[21] An underground room of the cryptoporticus of the Temple of Artemis was converted into a water-powered sawmill in the sixth century, used for sawing columns from the Roman temples to produce slabs of wall veneer for the local Byzantine churches and chapels.[22] Finally, in the seventh century, dyers were ensconced in the macellum.[23]

In the early eighth century, these workshops were abandoned to the benefit of the emergence of two artisanal hubs in the north and the south of the city, joined to the civic centre and the mosque by a market zone along the cardo, where late Umayyad shopkeepers' accounts were discovered.[24] This north–south axis acquired a strategic importance, by facilitating access to the town's two main centres of the craft industry and thus linking them to the city's political and religious institutions. In the north, a pottery production area developed between the north theatre and the Temple of Artemis from the beginning of the eighth century onwards, according to the material discovered. The north theatre, built in the second century and abandoned around the sixth century, following the earthquake of 551 that partly destroyed the stage and the cavea,[25] was reoccupied by five circular updraft kilns built in the entrance (area A 14–5), on the west side of the postscaenium (area B 4) and of the proscaenium (area B 5), and in the stands (area A 11) (fig. 3.2, Appendix 9–10).[26] The kilns were constructed by adapting and recycling the Roman remains (the kiln B 5 was built on landfill between the pilasters of an arch of the scaena) (fig. 3.3a–e). The nearby Temple of Artemis[27] also became a place of production in the early eighth century. Incomplete in the second century, a church took over its propylaeum[28] in the fifth century, when Jarash was Christianized. Definitively abandoned after the earthquake

[20] SEIGNE, J. (1981–3) 'Recherches sur le sanctuaire de Zeus', *JAP* 1: 48–9; (1985a) 'Notes préliminaires sur l'évolution architecturale du sanctuaire de Zeus à Jarash', *Syria* 62 (Fasc.1/2): 162–3.

[21] KEHRBERG, I. (2009) 'Byzantine Ceramic Productions and Organisational Aspects of Sixth Century A.D. Pottery Workshops at the Hippodrome of Jarash', *SHAJ* 10: 493–512.

[22] SEIGNE, J. (2002b) 'Une scierie mécanique au VIe siècle', *Archeologia* 385: 36–7.

[23] USCATESCU, A., MARTIN-BUENO, M. (1997) 'The Macellum of Gerasa (Jerash, Jordan): From a Market Place to an Industrial Area', *BASOR* 307: 67–88.

[24] BESSARD, F. (2008) 'Arabic Shopkeepers' Accounts from Islamic Jarash', *ADAJ* 52: 122–6.

[25] CLARK, V. A., BOWSHER, J. M. C., STEWART, J. D., MEYER, C., FALKNER, R. K. (1986) 'The Jerash North Theatre. Architecture and Archaeology, 1982–1983', *JAP* 1: 247.

[26] SCHAEFER, J. (1986) 'An Umayyad Potters' Complex in the North Theatre, Jerash', *JAP* 1: 411–49; FALKNER, R. K. (1986) 'A Note on the Two Kilns from the British Excavations at the North Theatre', *JAP* 1: 450–9.

[27] FISHER, C. S. (1938) 'The Temple of Artemis', in C. H. Kraeling (ed.) *Gerasa, City of the Decapolis* (New Haven: American Schools of Oriental Research) 125–38.

[28] PIAZZA, M. G. (1983–4) 'Soundings in the Intermediate Terrace of the Sanctuary of Artemis at Gerasa, 1979–1981', *Mesopotamia* 18(9): 113–34.

of 447, its esplanade was taken over by potters[29] in early Islam. Three brick and stone kilns—the large kiln A (diam. 7m), the kilns D and E (diam. 3–4m)—were raised around a dump B (L 6.30m, W 5m), where kiln waste, badly-fired, fused, and deformed vases, lumps of clay, and pre-reform fulūs were excavated (figs. 3.4 and 3.5).[30]

Examination of the potters' waste dumps reveals that artisans produced tiles, grey wares, and red wares (vertical rim bowls with slightly curved lower bodies and flat bases decorated with white wavy lines, cooking pots with string cut rims and horizontal handles that were in use until the ʿAbbāsid era, jars with round bodies and kick-up bases whose decoration of incised wavy lines and white swirls is characteristic of the early eighth century, and finally the zoomorphic-handle type of the Jarash lamps of oval-slipper shape, bearing Arabic inscriptions). While these shapes were common for domestic use in the Byzantine period, the frequency of incised or painted decoration links them more to the early Islamic era.

Symmetrically opposite this quarter, a contemporary productive hub also emerged in the south of Jarash between the Temple of Zeus and the hippodrome. The Temple of Zeus (fig. 3.6), damaged by the earthquake of 363 with elements of its architecture being reused in the sixth-century building of the Byzantine churches of St George, St Theodore and St John the Baptist, was taken over by glassmakers and potters in the early eighth century.[31] Soundings carried out in the south-west corner of the lower terrace of the sanctuary (area AH-AI/108), as well as excavations of the north (area AP/97) and south (area AL/98) supporting wall of the staircase leading to this terrace, revealed the existence of three circular kilns (diam. 3m), similar to the kilns of Artemis and the north theatre. These kilns were built in spolia and took advantage of the Roman architecture in their construction, adapting it to suit its new purpose.

Soundings carried out in the south-west corner of the lower terrace along the west side of the sanctuary (area AH-AI/108) revealed in 1985 the existence of a circular kiln (diam. 3m) dug into the rocky substratum and made of baked bricks and stones, where the firing chamber had been destroyed during work carried out by Haroutune Kalayan in 1978 (figs. 3.7 and 3.8).[32] The dating of the kiln was determined by the presence of reused elements belonging to the facade of the sanctuary on the external walls of the kiln, including a column capital reused as a doorpost. Its dating was also confirmed by its ceramic

[29] PARAPETTI, R., FONTANA, M. V., PIEROBON, R., BITTI, M. C., LAZZARINI, M. L. (1986) 'The Italian Activity Within the Jerash Project, 1982–83', *JAP* 1: 167–203.

[30] PIEROBON, R. (1983–4) 'Sanctuary of Artemis: Soundings in the Temple-Terrace, 1978–1980,' *Mesopotamia* 18(9): 85–111; (1986) 'The Area of the Kilns', *JAP* 1: 184–7.

[31] DUSSART, O. (1998) *Le verre en Jordanie et en Syrie du sud*, coll. BAH 152 (Beirut: Ifpo) 192–3.

[32] SEIGNE, J. (1985b) *Rapport spécial n°8. Un four de potier omeyyade* ('Ammān: DoA Archives).

output, with comparisons of identical remnants in Tell Ḥesbān, Pella, El-Bassa,[33] and Rujm al-Kursi[34] in Jordan, suggesting it originated from the Umayyad period[35] (remains of white slipped fragments of bowls and jars, carrying painted decorations of loops, flowers inside square grids, or wavy lines, and ceramic sherds bearing Arabic inscriptions in Kufic script). A second kiln (2.2m in diameter) made of fired bricks (figs. 3.9 and 3.10) was revealed during the excavation of the supporting wall (area AL/98) south of the stairs leading to the lower terrace of the Temple of Zeus in 1986. Identical to the kiln found in the south-west corner of the terrace of the temple, its dating was made possible thanks to its stratigraphic position after the establishment of the landfills on which it was built, landfills dated as being from the Umayyad period and predating the collapse of the facade of the sanctuary in 749. The dating of the kiln was also confirmed by its ceramic production consisting of grey ware of the early eighth century.[36] A final brick and stone kiln from the same period as the AL/98 and AH-AI/108 kilns and of similar construction was discovered in 1996 during the excavation of the north supporting wall (area AP/97) of the staircase leading to the lower terrace of the Temple of Zeus (fig. 3.11).

Immediately south of the Temple of Zeus and the line of fortification, the hippodrome (fig. 3.12) was also taken over by artisans from the early eighth century to the earthquake of 749. From the second to the fourth century, the building had been used for horse racing. However, from the fourth century, the collapse of the south-western part of its cavea precipitated the decline of the building. According to A. Ostrasz,[37] this was due to defects in the building of the supporting structure of the cavea, which probably could not bear the major earthquake of 363. The northern part of the hippodrome was probably transformed into an amphitheatre, by reducing the spina of the arena, as happened in Caesarea and Bet She'an, while the south-west cavea served as a stone quarry.[38] In the first half of the seventh century, the monument finally served for mass burials, after a serious outbreak of bubonic plague, most likely

[33] SAUER, J. A. (1986) 'Umayyad Pottery from Sites in Jordan', in L. T. Geraty, L. G. Herr (eds.) *Archaeology of Jordan and other Studies* (Michigan: Andrews University Press) 301–30.

[34] 'AMR, A. (1986a) 'Umayyad Painted Pottery Bowls from Rujm al-Kursi, Jordan', *Berytus* 34: 145–59.

[35] SEIGNE, J. (1985c) *Rapport spécial n°4. Une inscription peinte sur céramique* ('Ammān: DoA Archives).

[36] RASSON, A.-M. (1986) *Rapport spécial n°3. Un four de potier umayyade* ('Ammān: DoA Archives).

[37] KEHRBERG, I., OSTRASZ, A. (1997) 'A History of Occupational Changes at the Site of the Hippodrome of Gerasa', *SHAJ* 6: 170.

[38] SEIGNE, J. (2007) 'Deux Mass Burials du VIIe siècle p.c. ou la dernière vie de l'hippodrome de Gerasa (Jérash, Jordanie)', in D. Castex, I. Cartron (eds.) *Epidémies et crises de mortalité du passé* (Bordeaux: Ausonius Editions) 23–37.

around 638–9, killed several hundred inhabitants.[39] For half a century, the hippodrome remained in ruin until it was converted from 700 until the end of the Umayyads into a nucleated workshop. This workshop comprised around twenty dyers' units settled in the warehouse under the northern stands of the monument (rooms E1 to E7, and W2 to W21 of the hemicycle). Basins and vats had been fitted out by digging deeper into the original Roman floor. Spolia were extensively used to build these facilities (the room W14 contains a column drum recycled as a worktop and in the room E5 a Roman ossuary served as a basin). These facilities were systematically arranged within a paved area dedicated to textile cleaning, and a clay floor space used for dyeing.[40] Traces of hematite and archaeological parallels with late antique dyers' workshops in Isthmia[41] and Gaza[42] led us to assign them this function.

Most of the ceramics excavated in the dyers' workshop were late Roman and Umayyad: lamps, cooking vessels, bowls, jugs. The lamps are Jarash lamps, moulded lamps characterized by their oblong-shaped form and their zoomorphic-shaped handles. They were mostly decorated with stripes radiating down from the filling hole and with crosses, circles, or lines. They first appeared in the sixth century and remained in use until at least the end of the Umayyad period. A large number of sherds from cooking pots were also identified. They were characterized by their globular-shaped and ribbed body, their flat handles, joining rim and shoulders, and their rounded bases. Some examples were decorated with wavy lines painted in white tones, characteristic of the late Byzantine and the Umayyad period. Trefoil-mouthed jugs with cylindrical bases, frequent in the sixth century and still in use in the early Middle Ages, also appeared. Finally, dark grey ware bowls made of fine clay, produced from the Byzantine period until the tenth and eleventh centuries were unearthed. The clay used in these bowls was similar to that used in the output of the reduction kiln found near the north theatre dating from the Umayyad period. This assemblage has been helpful in confirming the reoccupation of the hippodrome after its decay in late antiquity, without providing a precise dating due to the common nature of the material. By contrast, architectural and numismatic clues—mainly the discoveries of post-reform Umayyad coins on floor levels—has enabled the establishment of a relative chronology of the workshop, which was probably active from the early eighth

[39] HENDRIX, K. B. (1995) 'Preliminary Investigation of the Human Skeletal Remains from the Hippodrome at Jarash', *ADAJ* 39: 560–2; (1998) 'Further Investigation of the Human Skeletal Remains from the Hippodrome at Jarash', *ADAJ* 42: 639–40.

[40] See Chapter 4 for more details on the dyers' workshop of the hippodrome of Jarash in the Umayyad period.

[41] KARDARA, C. (1961) 'Dyeing and weaving works at Isthmia', *AJA* 65: 261–6.

[42] OVADIAH, A. (1969) 'Excavations in the Area of the Ancient Synagogue at Gaza (Preliminary Report)', *Israel Exploration Journal* 19(4): 193–8.

century to the earthquake of 749, the *terminus ante quem*, which caused the final destruction of the hippodrome.

This phenomenon of grouping urban economic activities into intramural quarters in the late Umayyad dynasty is also attested in Baysān,[43] situated along the Jordan Valley (fig. 3.13). Textual evidence reveals that, in the late Roman period, linen production dominated the economic life of the city and more generally that of Galilee. The discovery of a massive quantity of glass and ceramic vessels stamped with the name of the city and of its artisans leads us to the conclusion that Baysān also hosted glassmakers and potters' workshops. Artisanal and commercial activities were spread around the *sigma*, along the Palladius and the valley streets, or outside the city wall in the sixth century. Conversely, as of the eighth century, a district dedicated to craftsmanship emerged between the theatre in the south, Palladius Street in the west, Silvanus Street in the north and in the east (fig. 3.14). Workshops specialized in the production of pottery and in dye concentrated there on the remains of ancient public edifices now privatized. De facto, the theatre[44] and the agora of the area were converted from their original functions into pottery factories. Ten kilns with a dump for baking waste which can be dated back to the early eighth century, with clay cleaning and preparing basins, were uncovered in the theatre on the east side of its orchestra (fig. 3.15 a–b). To the north of the theatre, on the remains of the agora, three contemporary kilns, with quadrangular basins, used for the preparation of the clay and a large building (14m by 24m) for the selling operations were also exhumed (fig. 3.16 a–b). Next to the agora, dyers settled on the remains of a Byzantine bath from the early eighth century onwards. On the remains of each of the three marble swimming pools of the bath, arranged around a court accessible by an entrance in the north-east, six basins were negligently established, intended for cleaning and fixing the colour of wool fabrics (fig. 3.17).[45] This clustering of craft activities was contemporary with the reoccupation of the markets of antiquity and with the erection of a new market in the east, along Silvanus street on the remains of a second-century Roman basilical edifice, that epigraphic evidence dates from 737–8 (Appendix 6–7).[46]

[43] WALMSLEY, A. (1992c) 'Vestiges of the Decapolis in North Jordan during the Late Antique and Early Islamic Periods', *ARAM* 4(1): 343–55.

[44] APPLEBAUM, S. (1978) 'The Roman Theatre of Scythopolis', *Scripta Classica Israelica* 4: 77–9; MAZOR, G. (1987–8) 'The Bet She'an Excavation Project: A City Center of Ancient Bet She'an', *ESI* 6: 19–22; (1988–9) 'The Bet She'an Excavation Project', *ESI* 7–8: 28–32.

[45] FOERSTER, G., TSAFRIR, Y. (1994) 'From Scythopolis to Baysān, Changing Concepts of Urbanism', in G. R. D. King, A. Cameron (eds.) *The Byzantine and Early Islamic Near East* (Princeton: Darwin Press) 111.

[46] KHAMIS, E. (2001) 'Two Wall Mosaic Inscriptions from the Umayyad Market Place in Baysān', *SOAS* 64(2): 159–76.

Between 700 and 750, the normalization of the Roman and late antique tradition of grouping markets and industries within the urban landscape was not isolated to the cities of southern Levant, but also appeared in coastal cities (Beirut, Arsūf) and north inland Greater Syrian towns (Apamea).

Indeed in Apamea, the Arabs restructured the south-east insula as an economic hub, bordered by the south decumanus and the cardo, originally the site of the Triclinos house (fig. 3.18),[47] which had been the official residence of a dignitary from the province of Syria Secunda in the fourth century, and of the cathedral to the east, built in the fifth century. The Triclinos house was mostly reused for metal crafts, judging from the remnants of crucibles and fragments of metal ore, found in dozens of small individual workshops obstructing its external court (figs. 3.19 and 3.20). The forged iron objects were sold in a blacksmiths' market operating in the converted cathedral. This artisanal cluster developed behind a market that had spread all along the south decumanus and the cardo, to the mosque bordering the main thoroughfare within the north-west insula. Closely tied to the religious and civic centre of the town, it emerged at a distance from the residential habitations, which in the early Middle Ages were concentrated within the east and north-east insulae, previously the site of the stately homes of Byzantine dignitaries.

Looking at the evidence from Jarash, Baysān, and Apamea from 700 to 750, the question remains as to whether these clusters were truly integrated into the urban fabric or positioned at the borders of towns, that would have experienced a realignment towards the interior after the Arab conquest.

Evidence from Jarash suggests that, despite a likely drop in the region's population in the seventh century as a consequence of the plague, the occupation of the city was not limited to a few households around the southern tetrakionia and the Umayyad mosque. Excavations in the churches of St Peter and St Paul, situated not far from the south-west ramparts of Jarash, carried out in 1929 by the British School of Archaeology in Jerusalem and Yale University, led to the unearthing of evidence attesting to a continuous occupation into the early Islamic period.[48] Likewise, in 2011, later surveys and soundings in the same south-western sector have provided material evidence that supports the supposition that this quarter at the periphery of the urban hypercentre, marked out in early Islam by the Friday mosque, did not in fact collapse. Rather, it was occupied and remained so without interruption long

[47] JOURDAIN, C. (1972) 'Sondages dans l'insula au triclinos, 1970 et 1971', in *Colloque Apamée de Syrie, Bilan des recherches archéologiques 1969–1971* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 113–42; BALTY, J.-C. (1969) 'L'édifice dit au triclinos', in *Apamée de Syrie. Bilan des recherches archéologiques 1965–1968* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 105–16.

[48] CROWFOOT, J. W. (1938) 'The Christian Churches', in C. H. Kraeling (ed.) *Gerasa, City of the Decapolis* (New Haven: American Schools of Oriental Research) 254.

after the Arab conquests; segments of streets and buildings with cisterns were in use under the Umayyads. It is therefore most likely that the economic clusters that developed around the north theatre and the Temple of Artemis, as well as between the Temple of Zeus and the hippodrome after 700 were integrated into the public space of the city at least until 749.

Likewise, no evidence points to the conquest of 636–40 as having caused a rupture in Baysān. Several indications do, however, lead us to believe that early Islam coincided with a gradual abandonment of the Hellenistic and Roman tells to the north, towards the valley. To the south-west, a continued occupation of the Roman residential neighbourhoods is supported by archaeological evidence, while a new residential sector most likely developed to the east around the amphitheatre and Orestes Street. In the early eighth century, the industrial and market quarter that developed in the amphitheatre, the south theatre and the agora therefore emerged at the outskirts of the residential areas. It grew, integrated into the urban fabric, between these domestic quarters and the centre of power that appears to have been located at the western edge of Silvanus Street.

From 700 to 750 in continuity with late antiquity, production and trade remained integrated into the urban sphere. However, when dispersed through the cityscape, these activities were now grouped in specialized quarters. Nucleation of urban retailing and crafts was not uncommon in the Roman and late antique periods and became the norm after 700. Communal working areas had fiscal and ideological advantages, enabling the Muslim imperial elites to ensure trade and productive practices adopted the new Islamic values. The ruling class used it also to collect revenue from urban trade and labour, in the form of a rent on properties. Within these integrated quarters, artisans found an immediate marketplace for the sale of their goods to discharge this rent, increasingly required in a monetarized form after 700.

2. PROCESS OF EXCLUSION OF ECONOMIC CLUSTERS UNDER EARLY ʿABBĀSID RULE

From the ninth century onwards, the ʿAbbāsids introduced a deliberate policy of relocating these clusters of markets and industries immediately outside the city walls, on virgin lands where the benefits of easier access to transport and more space to display and store goods favoured economic growth. This relocation also distanced pollution and noise from residential areas. From the end of the eighth century, the exclusion of the working clusters to the immediate outskirts was also motivated by a major change in the exercise of power. This took the form of a progressive state desideratum of separation between the ruling class and the population, along with the emergence of

palatial cities solely reserved for the court (Rāfiqa in 796, Sāmarrā in 835, and Cairo).

This progressive isolation of economic activities from places of power began in Iraq at the end of the eighth century, with the foundation of the quarter al-Karẖ, between the ʿĪsā and Ṣarāt canals, on the outskirts of Baghdad in 774.[49] The quarter, which had been a marketplace under the Sasanians,[50] had practical advantages in relation to space and communication. The canals could facilitate the importation of goods from Ǧazīra, Syria, and Egypt, while supplying water for artisans and pack animals.[51] It was therefore possible for markets and industries to flourish in the context of the natural growth of Baghdad subsequent to the foundations of the Round City being laid twelve years earlier. The separation of those in power from the artisanal and trading communities could also serve to protect the rulers against rebellion, which was narrowly avoided in 774, after Abū Zakarīyā' Yaḥyā b. ʿAbdallāh, the supervisor of Baghdad's inner marketplaces, made an alliance with the Shi'ites and induced the populace to revolt, using his position to carry out subversive activities against the authorities. The abortive revolt ended when the seditious Abū Zakarīyā was executed and his body hanged for all to see, a public demonstration of the authority of the government and its swift justice.

Al-Karẖ quarter hosted a population mostly of artisans and merchants of mixed origins[52] and grouped together several marketplaces (*aswāq*, *suwayqah*), workshops (*dār*), and hostels (*ẖān*, *funduq*) organized by profession and according to practical necessities.[53] Goldsmiths, cobblers, and tailors were settled along the thoroughfares gridding the quarter of al-Karẖ,[54] and reed weavers were located along the canal al-Daǧǧāǧ, which supplied a poultry market.[55] The butchers[56] were isolated for reasons of hygiene, as were the tanners, who were settled next to the animal market (*kunāsa*) at the western edge of the quarter.[57] To the north-west of al-Karẖ stood the quarter of ʿAttābiya, which was renowned for the production of expensive textiles. The local establishments included workshops producing cotton (Dār al-quṭn), silk (Dār al-qazz), and taffeta (*ʿattābī*, *siqlāṭūn*), that employed specialized workers, such as degreasers (*qaṣṣār*), carders (*naddāf*), spinners (*ẖazal*), weavers (*nassīǧ*), and tailors (*ẖayyāṭ*). Al-Karẖ quarter thus consisted of several economic areas, some having their own identity due to their high degree of specialization. In the district of Waddāh, owned and named after a client of

[49] For the history of the development of al-Karẖ, see Chapter 2.

[50] LASSNER, J. (1970) *The Topography of Bagdad in the Early Middle Ages* (Detroit: Wayne State University Press) 147–8.

[51] AL-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 250.

[52] AL-YAʿQŪBĪ (1892) 246.

[53] ẖAṬĪB AL-BAĠDĀDĪ (1931), *Ta'riẖ Baghdād* 1 (Cairo) 61–2; AL-YAʿQŪBĪ (1892) 246.

[54] ẖAṬĪB AL-BAĠDĀDĪ (1931) 113.

[55] AL-YAʿQŪBĪ (1892) 250.

[56] ẖAṬĪB AL-BAĠDĀDĪ (1931) 80.

[57] AL-YAʿQŪBĪ (1892) 244.

Caliph al-Manṣūr in charge of the arsenal, to the south of the gate of al-Karḫ, a book market boasted well over a hundred booksellers. Similarly, in the neighbouring concession, which belonged to another ʿAbbāsid client, Rabīʾ, the clothes sold were exclusively imported from Ḫurāsān.[58]

In 835, motivated by the increasing conflicts between the Turkish military guards of Caliph al-Muʿtaṣim and the local population, the court relocated to the palatial city of Sāmarrā, which became the capital of the ʿAbbāsids until 892. This retreat of the ruling elite from Baghdad to Sāmarrā further reinforced the exclusion of the economic activities ghettoized in al-Karḫ from the centre of civic power.

Concurrent with the foundation of al-Karḫ, the palatial city of Rāfiqa was built in 771 by Caliph al-Manṣūr, on the periphery of the Umayyad town al-Raqqa, situated on the junction of the river Euphrates and its tributary the Baliḫ in Ǧazīra. Between 796 and 808, Rāfiqa became the headquarters of ʿAbbāsid power under the reign of Hārūn al-Rašīd.[59] Excavations have revealed that the emergence of Rāfiqa was accompanied by the creation of a similar industrial and trading cluster between the Umayyad town and the ʿAbbāsid palatial settlement, at a distance from residential zones and places of power, on the modern outskirts of Mishlab (fig. 3.21). In early Islam, this consisted of an expanse of wasteland and an extensive area of clay. Archaeological remains of potters' workshops (Tell aswād) and glass and stucco industries (Tell al-zuǧāǧ)[60] were found. The products of Tell aswād and Tell al-zuǧāǧ artisans were meant to supply the needs of the occupants of Rāfiqa and presumably the town of al-Raqqa. Within this cluster, the markets, which were previously settled inside the walled city under Caliph al-Mahdī in 775–85, were integrated with one another.[61] The excavations of the potters' workshops (Tell aswād) led to the unearthing of fourteen kilns, tools,[62] and the remains of glazed sherds.[63] The kilns exhumed were of quadrangular shape and covered by three to four transversal arches.[64] Tell al-zuǧāǧ produced

[58] AL-YAʿQŪBĪ (1892) 245.

[59] BOSWORTH, E. (2003) 'Ar-Raqqa: Geopolitical factors in its history under the caliphs', in S. Heidemann (ed.) *Al-Raqqa II. Die Islamische Stadt* (Mainz: Von Zabern) 57–61; MEINECKE, M., HEUSCH, J.-C. (1985) 'Grabungen im ʿabbāsidischen Palastareal von ar-Raqqa/ar-Rafiqa', *DamMitt* 2: 85–105; (1995) 'Raqqa on the Euphrates: Recent Excavations at the Residence of Hārūn al-Rašīd', in S. Kerner (ed.) *The Near East in Antiquity* 2 ('Ammān) 17–32.

[60] HENDERSON, J., CHALLIS, K., O'HARA, S., McLOUGHLIN, S., GARDNER, A., PRIESTNALL, G. (2002) 'The Raqqa Ancient Industry Project', *Antiquity* 76: 33–4; HENDERSON, J., TONGHINI, C. (1998) 'An Eleventh Century Pottery Production Workshop at al-Raqqa. Preliminary Rapport', *Levant* 30: 113–27.

[61] AL-BALĀḎURĪ (1866) *Futūḥ al-buldān* (Leiden: De Goeje) 179.

[62] HENDERSON, J., TONGHINI, C. (1998) 114, 120.

[63] HENDERSON, J., CHALLIS, K., O'HARA, S., McLOUGHLIN, S., GARDNER, A., PRIESTNALL, G. (2005) 'Experiment and Innovation: Early Islamic Industry at al-Raqqa, Syria', *Antiquity* 79: 130–45.

[64] HENDERSON J. et al. (2002) 33–4.

evidence for both glassmaking and glass-blowing. The excavation of the tell led to the discovery of many hundreds of ʿAbbāsid glass vessel fragments, pulls of glass, rods of glass, dribbles, drops, raw glass, glass moils, fragments of crucibles, and trays used for casting glass blocks, as well as traces of four glass furnaces.[65]

The evidence from Baghdad and Raqqa reveals that the development of isolated palatial cities reinforced the segregation of marketplaces and industries on the outskirts of ʿAbbāsid settlements. This ghettoization of working areas at a distance from centres of civic power in the late eighth and ninth centuries also finds an illustration in Bālis, where 30 hectares of previous wastelands in the immediate southern outskirts were converted into a pottery production quarter.[66] Geophysical surveys of this area have revealed the existence of around fifty kilns built under the ʿAbbāsids and later the Ayyubids.

This extensive area of production in Bālis exemplifies the move made by the ʿAbbāsids after 750, from having simple communal working areas integrated into the urban fabric, as in the late Umayyad period, to developing industrialized quarters which emerged outside the walled cities. The growth of these quarters resulted arguably from top-down programmes and major changes in the urban strategy that included the separation of the elite from the living space of the wider populace. Organized following a coercive policy, these ʿAbbāsid economic zones consisted of sophisticated complexes endowed with an interlacement of varied cells having their own professional and ethnic identity. The ʿAbbāsid era therefore saw the transition towards ʻsatellite' economic areas that became a pan-Islamic urban characteristic, appearing in Central Asia in the form of the *rabaḍ* from the ninth century.

3. *RABAḌ* IN CENTRAL ASIA

In Central Asia, this model of partitioning urban life and clustering economic activities outside the walls spread in the early ninth century and led to the emergence of *rabaḍ*, cells of settlement, market, and productive activities, along the ramparts of the pre-Islamic cities of Sogdia and Farġāna. Following waves of often destructive Muslim conquests between 704 and 715, whose success was based on the political fragmentation of Transoxiana, the emergence

[65] HENDERSON, J. (1994) ʻAn Investigation of Early Islamic Glass Production in al-Raqqa, Syria', in P. Vandiver (ed.) *Issues in Art and Archaeology, Materials Research Society Proceedings* 3 (Mexico) 433–44; ʻArchaeological and Scientific Evidence for the Production of Early Islamic Glass in al-Raqqa, Syria', *Levant* 31 (1999): 225–40.

[66] See Chapter 4.

of the *rabaḍ* occurred in the context of major urban growth under the Sāmānids. This growth followed a decisive political change, after the definitive integration of the cities of Transoxiana within the Muslim world around 820, when the ʿAbbāsid caliphate started to rely on Central Asian elites.[67] The integration of Sogdia and Farġāna into the ʿAbbāsid Empire provoked a movement of 'defortification' of the cities in Transoxiana that expanded outside their walls, as the result of the migration of rural populations and the sedentarization of nomads.[68] In lowland Central Asia and the Iranian plateau (H̱urāsān, Seistān, the region of Isfahan, Fārs, and H̱uzistān),[69] the pre-Islamic cities, typically a citadel dominating a fortified city (Shahrestan), surrounded by walls built in mud brick, to protect against nomadic incursions, evolved towards a less enclosed model, where most economic activities were generally concentrated in independent 'satellite' *rabaḍ* outside the walled areas.[70]

Comparative analysis of urban chronicles, European and Soviet archives, reveals that the pre-Islamic cities of Samarkand in Sogdia, Uzkand, Uš (Osh), Qubā (Kuva), Aẖšīkaṯ (Akhsiket) and Khojent (Khujand) in the Farġāna valley, Taraz, Kulan (Lugovoe), Otrar, Sumbe, and Talghar in south Kazakhstan[71] experienced an urbanization and industrialization of their *rabaḍ*s between the ninth and thirteenth centuries. In every case, the pre-Islamic fortified settlements defined by a fairly compact occupation within the city walls[72] evolved,

[67] DE LA VAISSIERE, E. (2002) *Histoire des marchands sogdiens* (Paris: Collège de France) 257–88.

[68] BELENITSKII, A. M, BENTOVICH, I. B., BOL'SHAKOV, O. G. (1973) *Srednevekovyi gorod Srednei Azii* (Leningrad).

[69] DE PLANHOL, X. (1958) 'Les villages fortifiés en Iran et en Asie centrale', *Annales de Géographie* 67/361: 256–8.

[70] SOBTI, M. P. (2002) 'Palimpsest of Cultural Synthesis and Urban Change: Bukhara after the Islamic Invasions', *Built Environment* 28: 217–30.

[71] ZHUKOV, V. D. (1960) 'Obsledovanie gorodischa Staraya Kuva', *KSIIMK* 80; IVANOV, G. (2003) 'Excavations at Kuva (Ferghana Valley, Uzbekistan)', *Iran* 41: 205–16.

[72] The walls of early medieval Samarkand, by far the largest city in the region until the seventh century, enclosed a total area of 70 hectares, while smaller capitals like Penjikent, Maimurg (Kuldor-tepe), Abgar (Durmen-tepe), Kabudanjaket (Kurgan-tepe), the royal residence at Varaksha, and Paikend were on average concentrated within areas of 20 hectares. Even at Buẖāra, most estimates have kept the urban area within a 35-hectare limit.

For Panjikent and Kuldor-tepe, see BELENITCKII, A., MARSHAK, B., RASPOPOVA, V. (1981) 'Sogdiiskii gorod v nachale srednikh vekov - Itogi i metody issledovaniia drevnego Pendzhikenta' [The Sogdian city at the beginning of the Middle Ages: results and methods of the study of ancient Panjikent], *Sovetskaia Arkheologiia* [Soviet Archaeology] 2: 94–110, fig. 1; STAVISKII, B., URMANOVA, M. (1958) 'Gorodishche Kuldor-tepe', *Sovetskaia Arkheologiia* [Soviet Archaeology] 1: 232, fig. 1.

For Durmen-tepe, see SHISHKINA, G., NAIMARK, A. (1987) 'Istoricheskaia topografiia Durmen-tepe v svete rabot 1986 goda', in *Zadachi sovetskoi arkheologii v svete reshenii* XXVII (Moscow) 287–9.

For Kurgan-tepe, see AKHUNBABAEV, Kh. (1990) 'Drevnii Kabudanjaket', in *Arkheologiia Srednei Azii* (Tashkent) 26–7.

For Varaksha, see SHISHKIN, V. (1963) *Varaksha* (Moscow: Izdatelctbo Akademii Nauk) 38, fig. 5.

spilling out beyond their limits and forming unfortified settlements covering large areas of formerly rural territory from the ninth century onwards. The evidence shows that the outskirts acquired their own identity. Far from being mere extensions of the cities, soaking up an increasing demographic, they developed a major economic function.

Outside the walls, *rabaḍ*s emerged truly dedicated to production and exchange, whereas places of political and religious power remained inside the boundaries of pre-Islamic towns, as in Samarkand. In 710–13, Samarkand was the largest city of Sogdia, the centre of princely power and of vigorous resistance to Muslim invasion. The city had an ancient citadel, which overlooked, on the south side, a large Shahrestan. On the northern side of the citadel the main branch of a river, referred to in Arabic sources as wādī al-suġd (nowadays known as the Zarafshan), ran through a deep gorge. Immediately after the Arab conquests, the inhabitants were forced to leave the Shahrestan on pain of death and the new Arab-Muslim administration was established in the citadel, which was also the site of the main mosque. It is likely therefore that Arab-Muslim settlements in the first generation after the conquest were confined to the citadel hill. However, by the tenth century, the Shahrestan was once again inhabited and a new 'satellite' settlement emerged to contain the expanding economy. While the citadel continued to be the centre of power, the economic activities moved from the pre-Islamic *madīna* to extensive quarters established on the outskirts. Geographers describe the *rabaḍ* as extending over a vast area, surrounding the entire city and traversed by canals. *Ḫān*s, marketplaces, and communities of merchants were established, whose effervescence made Samarkand one of the major commercial hubs of Sogdia in early Islam. The *rabaḍ* maintained a physical relationship to the pre-Islamic Shahrestan, centre of domestic and administrative life, by networks of roads leading to the principal gates.

From the early ninth century, the city of Aḫšīkaṯ[73] experienced a similar clustering of its economic activities into new 'satellite' cells of settlement. In early Islam, Aḫšīkaṯ consisted in an antique citadel on a hill in the south-west corner of a Shahrestan (Akhsi 1A and 1B) surrounded by fortifications and

For Paikend, see MUKHAMMEDYAROV A. et al. (1988) *Gorodishche Paikend* (Tashkent) 77; TUREBEKOV, M. (1990) *Oboronitelnye sooruzheniia drevnikh poselenii gorodov Sogda* (Nukus) 56–65; MUKHAMEDZHANOV, A., MIRZAAKHMEDOV, D., ADYLOV, S. (1986) 'Kizucheniiu istoricheskoi topografii I fortifikatsii Bukhary', *Istoriia material'noi kultury Uzbekistana* 20: 99–100.

[73] ANARBAEV, A., REHREN, T., MAKSUDOV, F. A. (2004) 'Archaeological Researches in the City of Akhsiket', in *Arkheologicheskie essledovania v uzbekistane*: 29–42; ANARBAEV, A. (1988) 'Akhsikent in Antiquity and the Middle Ages (the results of research and future outlook)', *Sovietskia archaeologia* [Soviet Archaeology] 1: 172–86; (2000) 'History of the archaeological studies of the cities of Ferghana', in *Osh i Fergana v Istoricheskoi Perspektive*: 71–5; (2006) *Srednevekovoe zhilische Ahsikenta (XI–XII)*, coll. IMKU 35 (Tashkent).

towers, and a medieval *rabaḍ* (Akhsi II–IV) along the Syr Darya. After the Islamic conquest, the citadel remained the centre of power and the Shahrestan an area of domesticity. The chronicles report that the *dār al-imāra* and the prison were in the citadel of the pre-Islamic town, while the mosque was established in the Shahrestan that also seemed to keep its previous domestic functions, as evidenced by archaeology. Closely packed houses and a bathing complex dating to between the tenth and eleventh centuries were unearthed. By way of contrast, the economic activities were moved outside the walled city. The excavation of Akhsi II and III from the 1950s onwards led to the uncovering of extensive industrial facilities on the outskirts of the town, dating from the ninth to the eleventh centuries, with the remains of steelmaking,[74] copper smelting, and glassworking.[75] The militarization of the Sāmānid regime from 947 provided a vast market for products such as steel weaponry and armour. The multitude of glazed pottery shards on the site also probably indicates a locally-based glazed pottery industry.

The textual descriptions of Uš and Uzkand, situated close to Aẖšīkaṯ in Farġāna, show that these pre-Islamic cities experienced a similar growth from the ninth to the tenth centuries, which led to their extension onto their formerly rural outskirts. In both cases, the pre-Islamic citadels kept their function as the centre of power, by hosting the *dār al-imāra* and the prison, while the economic activities were moved to the immediate surroundings.[76]

In the south of Kazakhstan, at the confluence of the Syr Darya and the Aris rivers, the evolution of Otrar after the Muslim conquests, displaying a similar pattern to Aẖšīkaṯ and Samarkand, provides a final confirmation of the validity and geographical range of this model of urban economic development in the ninth to the tenth centuries. Due to its geostrategic location, the site was continuously occupied after the Muslim raids and experienced substantial growth under the Sāmānids. Around the Shahrestan and the citadel, whose occupation was maintained, the *rabaḍ* was urbanized and integrated into the antique settlement. Far from being an independent entity or an extension of the city, the outskirts became urban 'satellites', where most of the economic functions were transferred. This has been attested by the Archaeological Expedition of South Kazakhstan from 1971 that unearthed more than twelve workshops containing around eighteen potter's kilns. Potters' tools were found in the workshops near the pits where the rejected items were dumped. Frequently, the finds included prepared materials as well as various glazed and unglazed pieces.

[74] ALIPOUR, R., GLEBA, M., REHREN, T. (2011) 'Textile Templates for Ceramic Crucibles in Early Islamic Akhsiket, Uzbekistan', *ATN* 53: 15–27.

[75] REHREN, T., OSORIO, A., ANARBAEV, A. (2010) 'Some Notes on Early Islamic Glass in Eastern Uzbekistan', in B. Zorn, A. Hilgner (eds.) *Glass along the Silk Road from 200 BC to AD 1000* (Mainz: Schnell & Steiner) 93–103.

[76] IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: De Goeje) 513.

The tenth-century description of Nishapur (Nīsābūr) in Iran, by the geographer al-Iṣṭaḫrī, preserved in Ibn Ḥawqal's *Kitāb ṣūrat al-arḍ*, demonstrates that this model was also adopted in Iran in the Ḫurāsān. It is mentioned that the *rabaḍ* was the centre of urban economic life. Its organization was based on profession, status, and wealth. Trade took place in markets made up of individual shops, as well as *ḫān*s and hostels, which also facilitated the lodging of merchants. Markets were divided according to speciality and wealth. Certain *ḫān*s and hostels were reserved for the wealthiest merchants, mostly the travelling traders. The *rabaḍ* also included an industrial zone, divided by profession, made up of individual workshops and collective working establishments that hosted a series of elementary working units and residential rooms.[77]

This combined evidence shows how the development of the *rabaḍs* complemented a reoccupation of the pre-Islamic citadel and Shahrestan. In Central Asian and Iranian cities, whose pre-Islamic settlements maintained strong domestic, religious, and political functions, the transference of the heart of the urban economy to the 'satellite' *rabaḍ*s led to the symbiotic relationship between the two entities and the evolution from inner core organized settlements in the seventh and eighth centuries to 'polycentric' cities.

Archaeological and textual clues therefore reveal that there was nothing radically innovative in the location of urban retail and crafts, but rather a practice of replicating and normalizing those that were already in existence in the late seventh and early eighth centuries. Their increasing clustering into communal areas was most likely supported by the change in the patronal system and the increasing imperial involvement in the development of urban economy. A rupture from the past emerged later under the ʿAbbāsids, when these areas, originally integrated into the urban fabric, were progressively relocated to the immediate vicinities of Middle Eastern towns. The regional approach of the early Islamic economy demonstrates that this process did not emerge synchronically after the Islamic conquests. It was implemented first in the late Roman cities of the Levant before spreading to Iraq and Central Asia.

4. ISOLATION OF DOMESTICITY

This process of clustering urban economic life after the rise of Islam, which occurred hand-in-hand with the evolution of the patronal system, affected the traditional patterns of domestic life in the eighth and ninth centuries. Originally, in the high-imperial Roman era and late antiquity, the private urban

[77] IBN ḤAWQAL (1939) 432.

household could fulfil an important economic function indeed, by hosting artisanal activities.[78] This interplay between domestic and economic life finds a compelling material illustration at Pompeii. The Pompeian evidence shows that many excavated bakeries, as well as the largest fulleries—such as the *fullonica* of Stephanus[79]—were situated within domestic complexes. In Stephanus' household, the residential and industrial functions were effectively interwoven. The *fullonica*—identified from the narrow niches, in which clothes were soaped, and the rinsing basins—built in the third/fourth century occupied the southernmost part of the building, discreetly located in the back yard, while the rooms surrounding the atrium, where assemblages of personal items and domestic utensils were found, had an obvious residential function. While household production was often targeted at supporting family needs, the remains of a shop attached to Stephanus' house imply a tendency towards commerce. Archaeological and literary evidence exists showing houses performing an economic role in Asia Minor and Greater Syria,[80] in Zeugma and Antioch, or in Iran until the end of antiquity.

Yet, from the early eighth century, private households underwent a withdrawal from social and economic activities, progressively fulfilling an exclusively domestic function. The early Islamic period witnessed an introversion of houses in the search for privacy, in the context of a growing distinction between domestic and professional life. Productivity in households ceased to be market-orientated, but instead to respond to the sole requirements of the dwellers. They retreated from their social and economic purpose to turn into places of consumption and fulfil an exclusively domestic role.

4.1 Productive and public use to domestic shelter

Literary sources, as well as excavations of domestic quarters in Greater Syria and North Africa, reveal that houses ceased to be exploited as places of urban production, and this introversion of private dwellings was manifested

[78] MACKAY, A. G. (1975) *Houses, Villas, and Palaces in the Roman World* (Baltimore: Johns Hopkins University Press); LEVEAU, Ph. (1988–91) 'Aspects de l'espace domestique dans l'habitat urbain antique des pays devenus musulmans', in *L'habitat traditionnel dans les pays musulmans autour de la Méditerranée* 1 (Cairo: Ifao) 339; CASTEL, C., MAQDISSI, M., VILLENEUVE F. (eds.) *Les maisons dans la syrie antique du IIIe millénaire aux débuts de l'Islam. Pratique et représentations de l'espace domestique: actes du colloque international* 27–30 juin 1992 (Beirut: Ifpo, 1997).

[79] FLOHR, M. (2011) 'Reconsidering the atrium House: Domestic fullonicae at Pompeii', in E. Poehler, M. Flohr, K. Cole (eds.) *Pompeii: Art, Industry and Infrastructure* (Oxford: Oxbow) 89–94.

[80] IVISON, E. A. (2007) 'Amorium in the Byzantine Dark Ages (Seventh to Ninth Centuries)', in J. Henning (ed.) Millennium-Studien studies (coll.) *Post-Roman Towns, Trade and Settlement in Europe and Byzantium* 2 (Berlin: De Gruyter) 25–59.

physically by an important change in the use and status of the central courtyard, typical in Middle Eastern houses. The courtyard lost its social and economic functions and came to be used for utilitarian purposes. Animals were kept there in stables. Jars of oil, grain, and fresh water were stored. The linen was boiled up, beaten, and washed in vats and fulling stalls,[81] and kitchens were built. In the ninth century, al-Kindī complains about tenants in Baṣra, who established kilns and *tannūr* carelessly on the roof of Baṣran houses, whereas the ground floor was more appropriate for cooking.[82]

In the Levant, in Roman private urban houses reoccupied after the Arab-Muslim conquests, the decline of the ornamental, social, and professional functions of the peristyle courtyard, and its reuse for circulation and practical purposes conditioned a shift in the traditional architecture. At Apamea, the excavations of Jean-Charles Balty[83] revealed a group of dwellings (Houses 'aux pilastres', 'aux consoles', 'des chapiteaux à consoles', and 'aux colonnes trilobées'), which were built during the second century, on a similar axial or radial model, around a peristyle courtyard, either rectangular and bordered by an apsed room, or square surrounded by several ceremonial spaces. Their central courtyards formed an essential element ensuring the architectural coherence of these houses, which belonged to a wealthy local elite of landowners, whose properties extended both on the steppe and the Limestone Massif. After the Muslim conquest of 636–8, the emergence of an artisanal and trading hub in the south-east insula, affected the social functioning and organization of these private houses in the second half of the seventh century and the beginning of the eighth century. Excavations have shown that their peristyle courtyards did not maintain the same ornamental functions. Along with the surrounding ceremonial rooms, they were divided in order to create smaller units, which leads us to believe that they were reoccupied exclusively for a utilitarian purpose. Walls in reused stones and blocks were carelessly built to compartmentalize spaces.

For instance, in the House 'aux pilastres', the large reception room A, with its tripartite entrance on the north of the peristyle courtyard and its two lateral bays, was thus divided into six rooms, the galleries of the peristyle into twelve, the rooms I, L, and AB-AC in two.[84] The space S, in the north-east side of the peristyle courtyard equally lost its original social function in early Islam, to give access to the latrines and the water reservoirs to be used as a domestic

[81] AL-ǦĀḤIẒ (1984) *Kitāb al-buḫālā'* (Cairo: Dār maktaba al-hilāl) 115–16.

[82] AL-ǦĀḤIẒ (1984) 115.

[83] BALTY, J.-Ch. (1984b) 'Notes sur l'habitat romain, byzantin et arabe d'Apamée. Rapport de synthèse', in J.-Ch. Balty (ed.) *Apamée de Syrie. Bilan des recherches archéologiques 1973–1979. Aspects de l'architecture domestique d'Apamée* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 471–503.

[84] GISLER, J.-R., HUWILER, M. (1984) 'La Maison aux Pilastres', in J.-Ch. Balty (ed.) *Apamée de Syrie* 90–3.

waste facility.[85] Similarly, in the House 'des chapiteaux à consoles', the peristyle courtyard was also divided into two parts, by a wall made of column shafts. On the ground floor, dumps were placed to dispose of catering waste. The room F-H was also transformed into a dump, where ceramics and bone remains were discarded.[86] Furthermore, in the House 'des chapiteaux à consoles', the two polylobed basins, built in the north of the peristyle courtyard during the initial occupation of the house, were filled up with glass, ceramics, and bone remains, mostly catering waste.[87] Equally, this diversion for utilitarian purposes of the primary ornamental and social functions of the ground floor of the individual houses in Apamea is physically reflected by the development of animal enclosures for donkeys, horses, or camels, notably in the courtyard of the Houses 'aux pilastres',[88] 'aux consoles',[89] and 'aux chapiteaux à consoles'.[90] In these three dwellings, several troughs in stone, among which one included a hole to attach the halter of a pack animal, as well as multiple stones with fastening facilities to tether animals around the peristyles of their central courtyards, have been discovered and were used to feed and keep cattle in stables. Finally, the original design of the peristyles and the surrounding rooms in the private urban dwellings of Apamea was substantially altered by the building of kitchen items (a kiln on the paved floor of the peristyle of the House 'aux consoles'[91]), of a water well and fresh water basins to supply animals and family consumption,[92] and of vats and fulling stalls for cleaning linen as in the room Q of the House 'aux pilastres'.[93]

In the early eighth century, a similar evolution of households, in the context of a growing separation between domestic and economic urban areas, has been

[85] GISLER, J.-R., HUWILER, M. (1984) 'La Maison aux Pilastres', in J.-Ch. Balty (ed.) *Apamée de Syrie* 90.

[86] BALTY, J.Ch. (1984a) 'La Maison aux Consoles', in J.-Ch. Balty (ed.) *Apamée de Syrie* 37; GAUTIER, A. (1977) *Les Restes de Vertébrés de la Maison aux Consoles*, Miscellanea 12 (Brussels: Centre belge de recherches à Apamée de Syrie).

[87] BARATTE, FR. (1984) 'La Maison des Chapiteaux à Consoles', in J.-Ch. Balty (ed.) *Apamée de Syrie* 122.

[88] GISLER, J.-R., HUWILER, M. (1984) 92.

[89] BALTY, J.-Ch. (1984b) 'Notes sur l'habitat romain, byzantin et arabe d'Apamée. Rapport de synthèse', in J.-Ch. Balty (ed.) *Apamée de Syrie* 497.

[90] BARATTE, FR. (1984) 122.

[91] BALTY, J.-Ch. (1984a) 'La Maison aux Consoles', in J.-Ch. Balty (ed.) *Apamée de Syrie* 37.

[92] In the House 'aux pilastres', a pit was dug in room I. At the south-western angle of room AK, a square basin was also built in early Islam, made of baked bricks recovered with a damp-proofing coating. Similarly in the south-western angle of room Y, a large basin was carved from a piece of stone. GISLER, J.-R., HUWILER, M. (1984) 92.

In the House called 'aux chapiteaux à consoles', a pit is dug in the northern portico and five basins are built in room D after the Muslim conquest. The access between the peristyle and room D were blocked. The basins were made from rubble and stone slabs. They were not plastered, which tends to suggest they were used to store dry commodities and not liquids. BARATTE, FR. (1984) 122.

[93] GISLER, J.-R., HUWILER, M. (1984) 92.

revealed in Palmyra. After the rise of Islam, the commercial and production activities were relocated altogether along the main colonnaded decumanus, between the tetrapylon and the Camp of Diocletian. It seems that this evolution coincided with the isolation of the domestic quarter of Palmyra between the so-called 'street of the two churches' in the west, and the so-called 'Diogène' street in the east. This also led to the complete redesign of several second-century houses. The dwellings generally comprised richly ornamented courtyards originally used as reception and production spaces. Yet, in early Islam, it appears that walls in reused blocks were built carelessly to divide the large space of the peristyles and the surrounding reception rooms into small units dedicated to practical purposes, where pithoi, basins, and mangers were set up to feed animals.[94]

Overall, this indicates that the domestic architecture evolved towards a common pattern in early Islam with a clear trend towards performing crafts outside living quarters. It became increasingly common that the ground floor of private dwellings became exclusively used for hosting animals and storing grain. It is readily confirmed in the instance of Pella, where in the remnant deposits of the courtyard of house G, which collapsed in the 749 earthquake, were discovered, among various mid-eighth-century artefacts, the skeletons of three cows (rooms 8–9), small equids (mules or donkeys in the inner courtyard and the rooms 6–7), sheep, goats, and chickens trapped on the ground floor.[95] In the same manner, in ninth-century Iraq, in Baṣra, certain houses were rented for a monthly sum of money and a portion of fodder that the tenants bought to feed their animals.[96]

In cases where the urban households in early Islam did continue to host a form of artisanal activity, it was therefore not market-orientated anymore, but exclusively dedicated to respond to the needs of the family. While it may have survived under the Umayyads, the common model for craftspeople to operate in their own households disappeared progressively. Ninth-century literary sources mention that servants in private urban dwellings were either qualified, paid, and protected (*mawlā*), used as head cook (*ḫabbāz*)[97] or bleacher (*qaṣṣār*),[98] or in slavery. Slaves (*ġulām*) were used to receive guests and serve water and food during meals.[99] This qualified or slave labour force was used to

[94] GAWLIKOWSKI, M. (1997) 'L'habitat à Palmyre de l'Antiquité au Moyen-âge', in C. Castel, M. al-Maqdissi, F. Villeneuve (eds.) *Les Maisons de la Syrie Antique du IIIe millénaire aux débuts de l'Islam. Pratiques et représentations de l'espace domestique* (Beirut : Ifpo) 161–6.

[95] WALMSLEY, A. (2007c) 'Households at Pella, Jordan: Domestic Destruction Deposits of the Mid-8th C.', in L. Lavan, E. Swift, T. Putzeys (eds.) *Objects in Context, Objects in Use: Material Spatiality in Late Antiquity* (Leiden: Brill) 264.

[96] AL-ĞĀḤIẒ (1984) 113. [97] AL-ĞĀḤIẒ (1984) 193; 234.

[98] IBN BAḤŠAL (1967) *Ta'rīḫ Wāsiṭ* (Baghdad: Gurguis 'awwād) 119.

[99] AL-ĞĀḤIẒ (1984) 100.

respond to the needs of the family and was not involved in any profit-making activity in the household. The eighth and ninth centuries thus witnessed a progressive distinction between private and professional life, in the context of economic growth, which featured the emergence of urban quarters dedicated solely to artisanal and market activities.

4.2 An emphasis on intimacy

Between the eighth and ninth centuries, the functions of houses in the Near East, Iran and Central Asia progressively reduced to the preservation of the intimacy of the family group. Changes in the inner planning of houses reflect this introversion and the confinement of the family in the upper levels.

The evolution in the distribution of openings—bays and windows—attests, for instance, to this phenomenon. Originally prevalent at street level, they henceforth multiplied in the upper levels and became almost non-existent on the ground floor external facades, in order to prevent any intrusion into the intimacy of the household. This is seen in the port of Sīrāf in Iran, occupied continuously from the ninth century to the earthquake of 977. In 1967, the excavation of the port led to the discovery of a major domestic quarter, comprising a group of wealthy individual dwellings, House N (272m²), S (210m²), and E (324m²), established along the main thoroughfare. The houses, square in form and built in stones and gypsum mortar decorated with stucco, contained probably several storeys. All of them presented a similar plan, defined as several rooms around a courtyard, accessible by an entrance, either central (House N) or offset (House S). The examination of the external walls of the dwellings shows that the ground floor was lit by the courtyard and that there were no windows. A 'blind' peripheric wall therefore protected the private area of the house from the external urban circulation.[100]

This introversion of private urban households was reinforced by the reduction of the entrance to a small opening. Protected from external intrusion, domestic life flourished in the upper storeys of the private individual dwellings. The structural separation between the utilitarian space on the ground floor and the private area in the upper levels, hitherto presumed by the archaeology, is confirmed in the description of al-Ǧāḥiẓ of the traditional individual house of Baṣra in the ninth century. The house comprised two storeys and a roof terrace. In the central courtyard, donkeys and sheep were kept in stables. The rooms opening onto the courtyard served to store water, oil, and grain, as well as to clean linen in the vats and fulling stalls. The house

[100] WHITEHOUSE, D. (2002) 'The House of Siraf, Iran', in D. Waines (ed.) *Patterns of Everyday Life* (Aldershot: Ashgate) 179–262; (2009) *Siraf : History, Topography and Environment* (Oxford: Oxbow).

did not include any private bath. The household's members completed their daily ablutions by using the fresh water stored in the jars on the ground floor. Pit latrines were dug in a room next to the dwelling. The upper storeys and the roof constituted the private domain of the family. The various rooms were versatile, in the absence of cumbersome furniture such as large cupboards, tables, and chairs. Meals were notably taken wherever appropriate on a tray placed on a stool with the diners seated on the floor; tray and stool were removed afterwards and stored away. Spaces in the upper levels could be used interchangeably for recreation, eating, sleeping, and other domestic tasks. The floor of the rooms was generally plastered or paved, whereas the roof was often decorated with gilding and woodwork in teak.

This preservation of family intimacy is perceptible across the Muslim world as far as Central Asia. Houses of the ninth and tenth centuries excavated in Iran, Turkmenistan in Merv, or recently in Uzbekistan in Paykand were all built following different traditions, in the form of multiple-storey buildings opening onto a central courtyard or compact single-storey dwellings, of cruciform or quadrangular design, surrounded by an outside private space. Nevertheless, early Islamic evidence suggests that they were all functioning in the same way, independently from each other and in the search of privacy.

From 700 to 950, the evolution from individual to imperial patronage of urban economy generated a growing partitioning of urban life between labour and domesticity. Initially, communal working areas integrated into the urban fabric increased during the late Umayyads between 700 and 750, to the detriment of the previous disseminated model. Subsequently, from the end of the eighth century, these integrated working areas were relocated outside the walled cities in early ʿAbbāsid Iraq, as residential life started to become more discretely conceived and practised. The segregation of the urban economy spread in Central Asia, where independent 'satellite' *rabaḍ*s emerged in the ninth and tenth centuries, in the context of an economic and urban growth under the Sāmānid government between 892 and 998. In early Islam, a change in the exercise of economic patronage and a new desideratum to separate power and domestic life from marketplaces and industries, led to the development and then normalization of the Roman practice of clustering retailing and craft activities. While such clustering disappeared in the West with the collapse of Roman urbanism, it thus persisted in the East, and the Islamic evidence presented here is a continuation and standardization of that late Byzantine and ultimately Roman model.

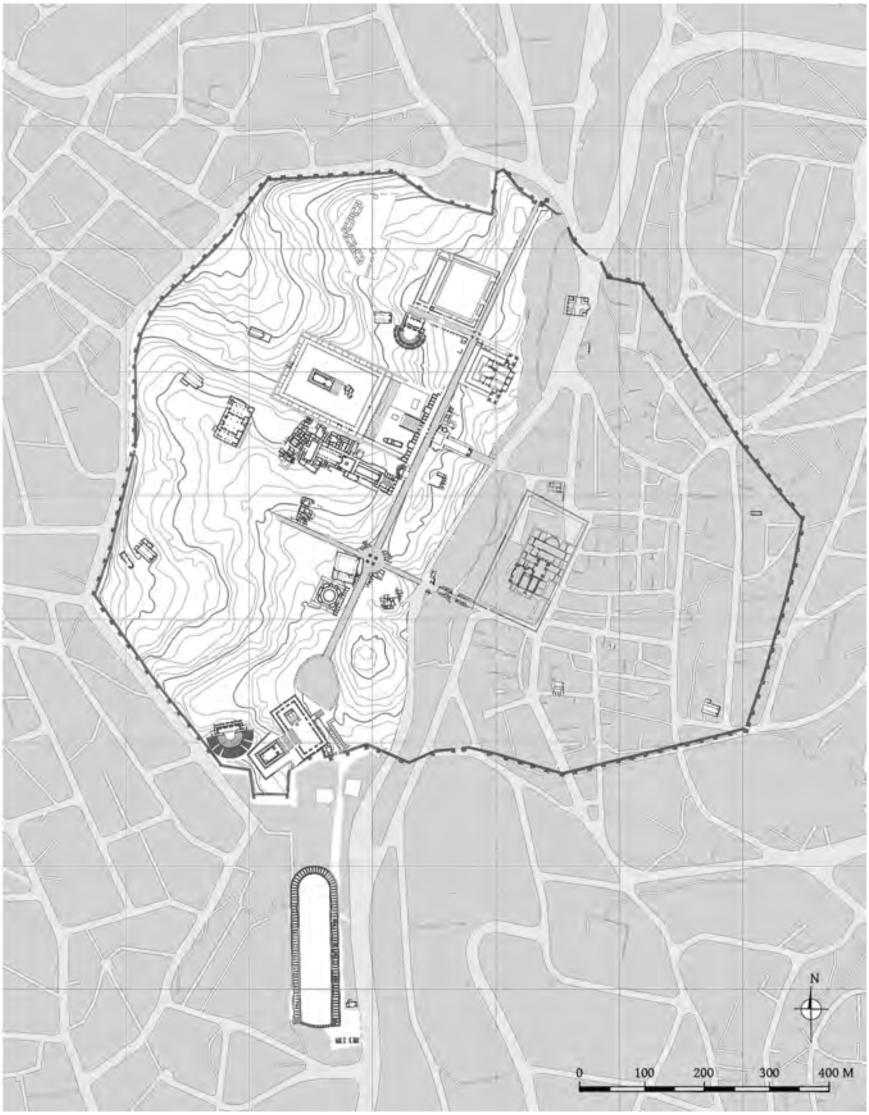


Fig. 3.1 Jarash: map of the settlement. (Courtesy of Th. Lepaon)

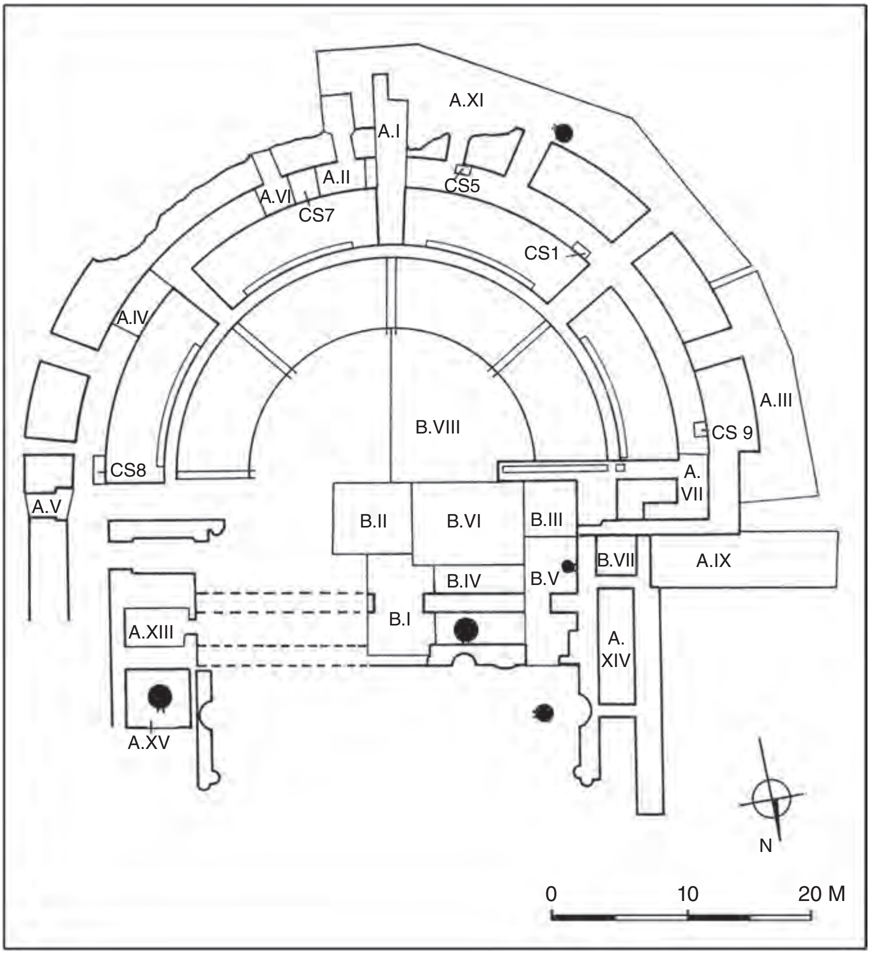


Fig. 3.2 Jarash: plan of the north theatre with five kilns built under the Umayyads. (Clark, V. A. 1981–3)

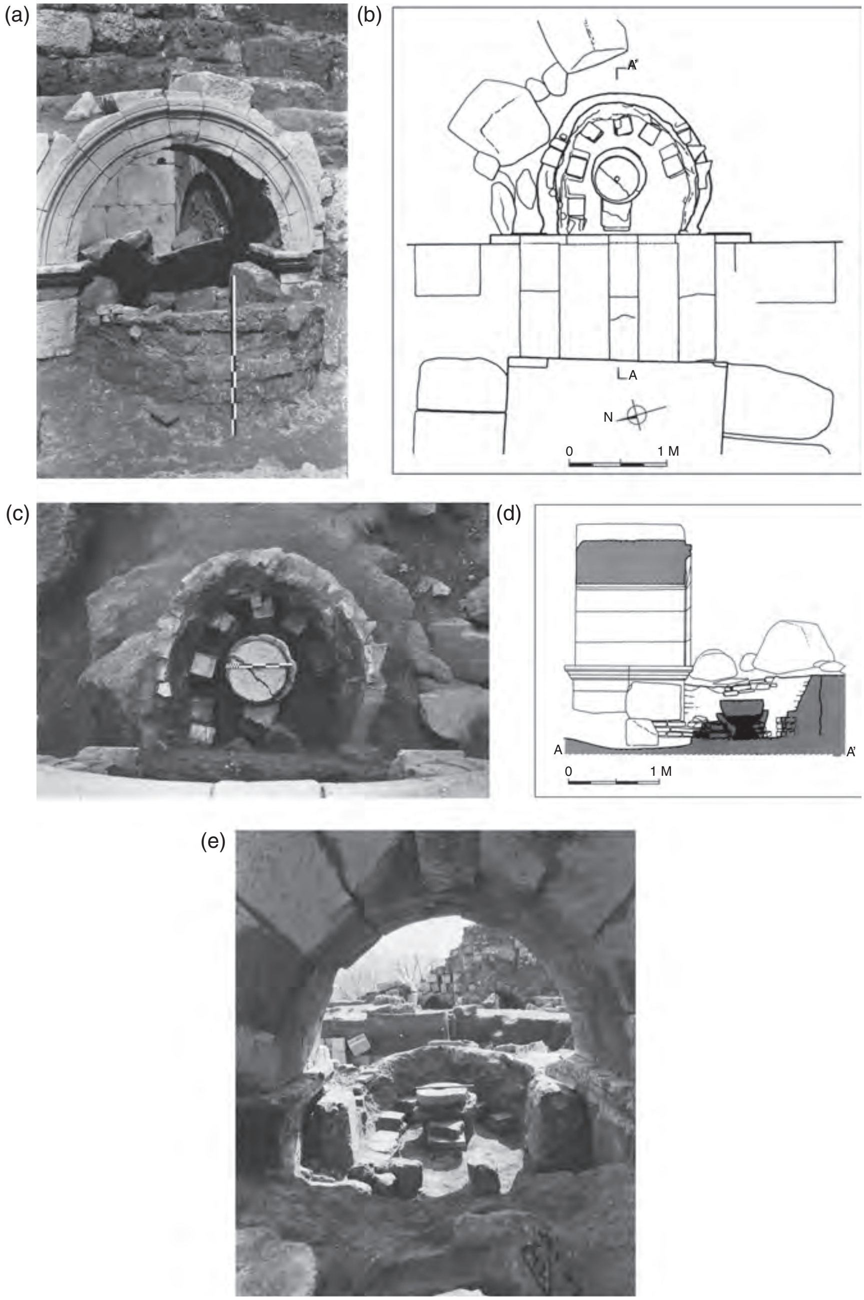


Fig. 3.3 Jarash, north theatre: kiln B/V. (a) General view of kiln B/V. In the Middle Ages, artisans built the kiln against the bay of the western wall of the proscaenium upon a thick 1.8m layer of rubble and balast. The kiln was thus placed at the level of the capitals which supported the arch that covered the bay. (© Archives of the DoA, ʻAmmān). (b) Plan of Kiln B/V (Schaefer, J. 1981–3). (c) View of the kiln's core B/V(© Archives of the DoA, ʻAmmān). (d) AA' cross section of kiln B/V (Schaefer, J. 1981–3). (e) View of the opening of kiln B/V. (© Archives of the DoA, ʻAmmān)

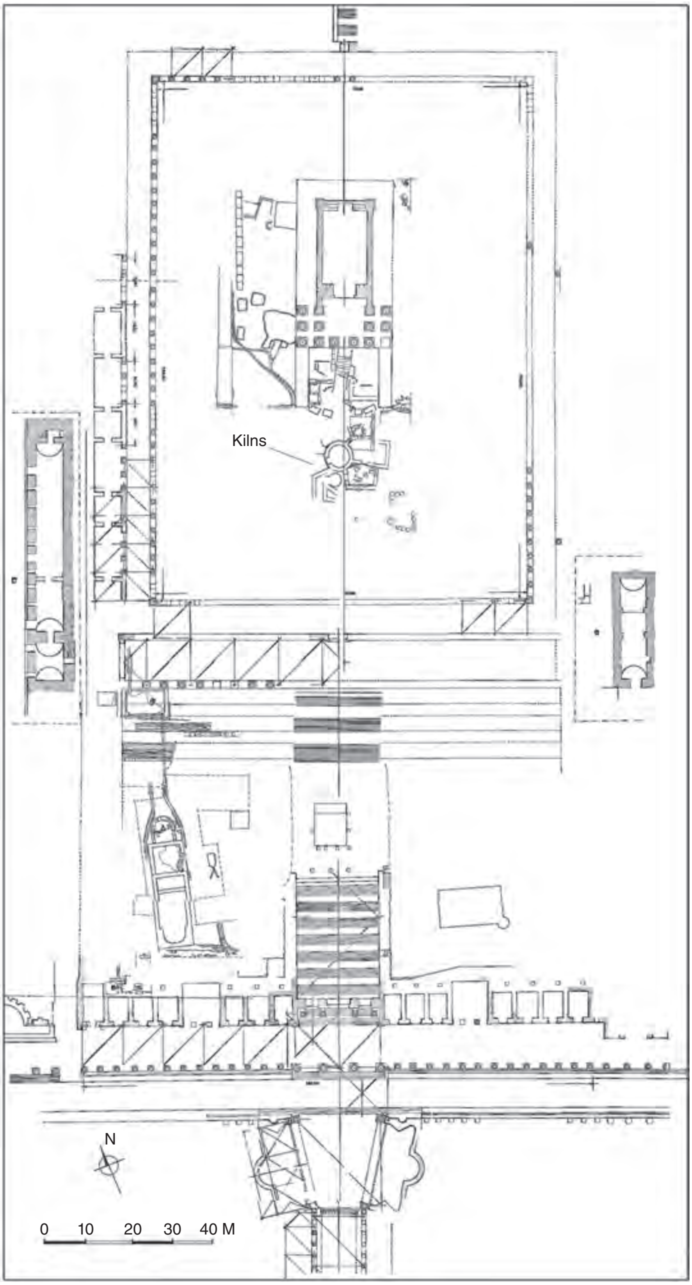


Fig. 3.4 Jarash, Temple of Artemis: plan of the temple with Umayyad kilns. (Parapetti, R. 1983–4)



Fig. 3.5 Jarash, Temple of Artemis: view of the kilns. (© Archives of the DoA, ʿAmmān)

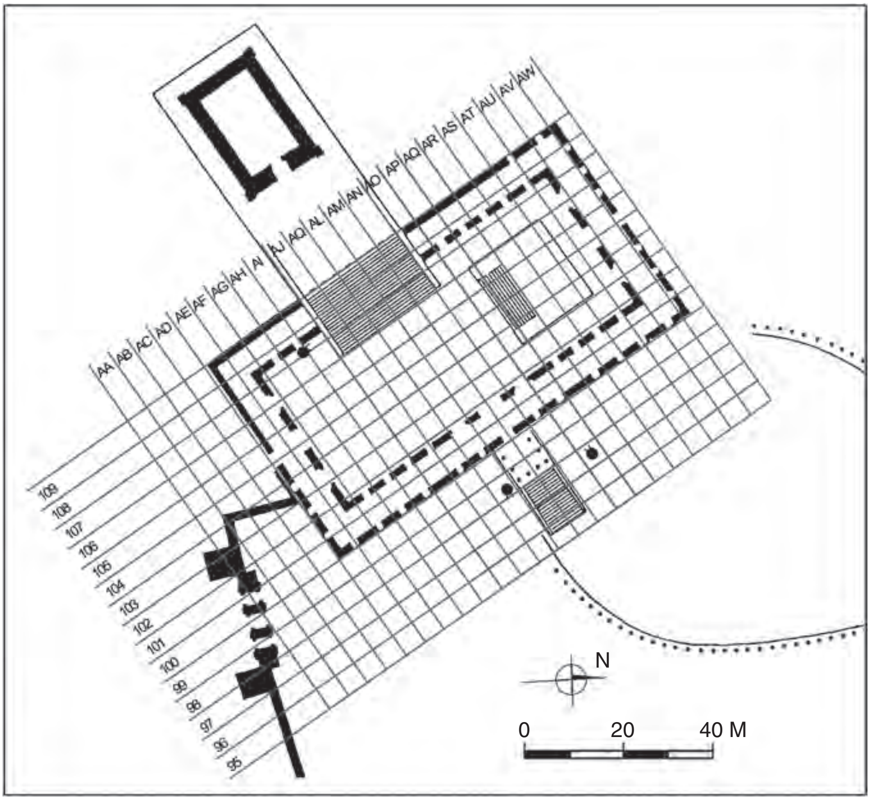


Fig. 3.6 Jarash, Temple of Zeus: plan of the temple reused to build Umayyad kilns. (Seigne, J. 1981–3)



Fig. 3.7 Jarash, Temple of Zeus: kiln AH-AI/108. (© Archives of the DoA, ʿAmmān; courtesy of the Ifpo)



Fig. 3.8 Jarash, Temple of Zeus: kiln AH-AI/108. View of the kiln's opening built with reused material. (© Archives of the DoA, ʿAmmān; courtesy of the Ifpo)

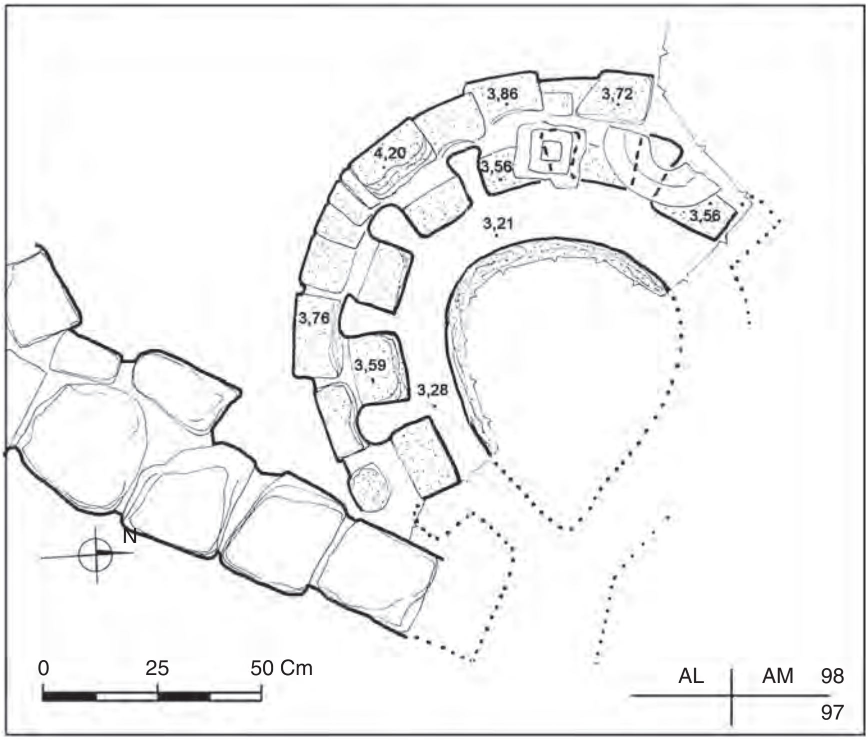


Fig. 3.9 Jarash, Temple of Zeus: plan of kiln AL/98. (© Archives of the DoA, ʿAmmān; courtesy of the Ifpo)



Fig. 3.10 Jarash, Temple of Zeus: kiln AL/98. General view of the circular kiln. It was partially destroyed during the 1970s. Only the south-western side of the heating room with its pillars were found on-site. (© Archives of the DoA, ʿAmmān; courtesy of the Ifpo)



Fig. 3.11 Jarash, Temple of Zeus: kiln AP/97. View of the kiln's heating room with its pillars. (Courtesy of F. Bernel, Ifpo)

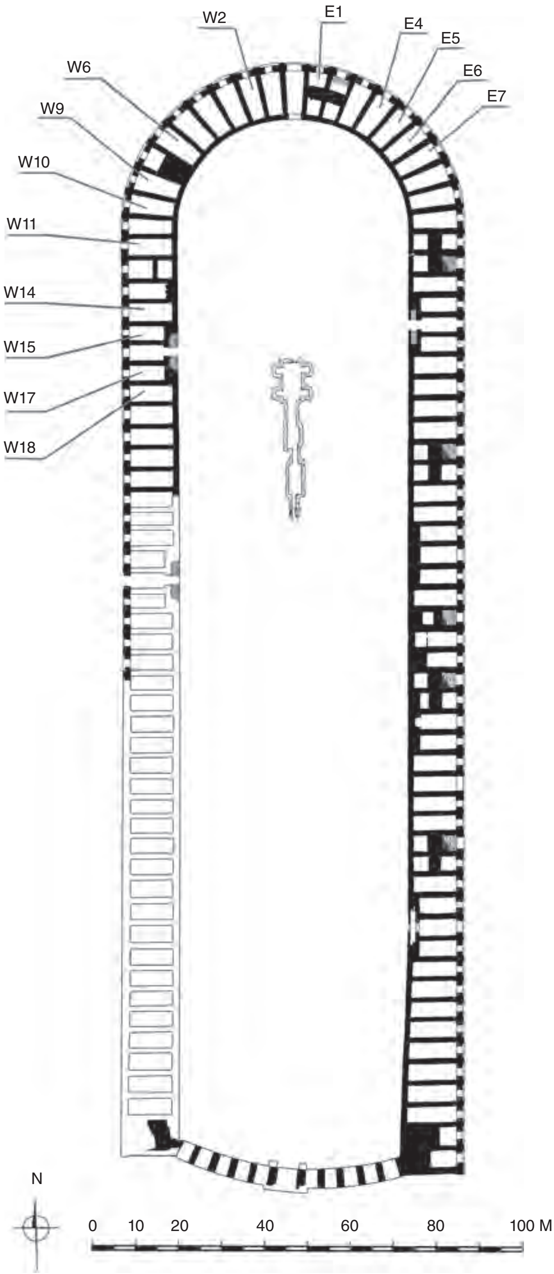


Fig. 3.12 Jarash, hippodrome: plan of the hippodrome on which the locations of dyeing workshops dating from the end of the seventh and eighth centuries are indicated. (Workshops excavated by F. Bessard, J. Bonnéric, O. Callot, 2007–9.) (General plan of the hippodrome after A. Ostrasz, 1989)

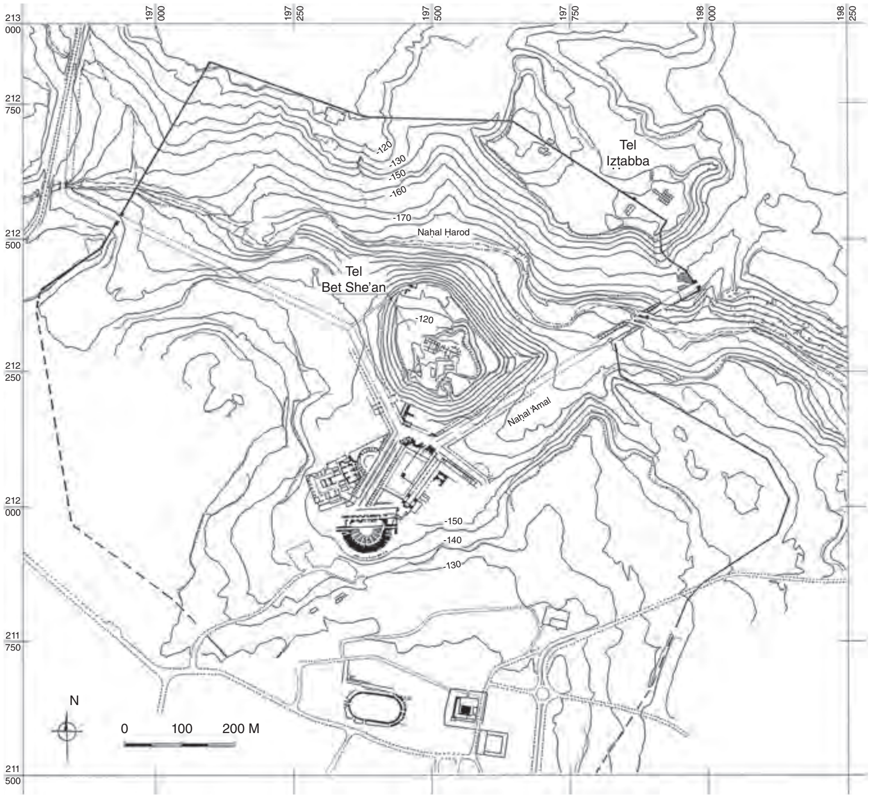


Fig. 3.13 Baysān: plan of the settlement. (Mazor, G., Bar-Nathan, R. 1998. Courtesy of the Israel Antiquities Authority)

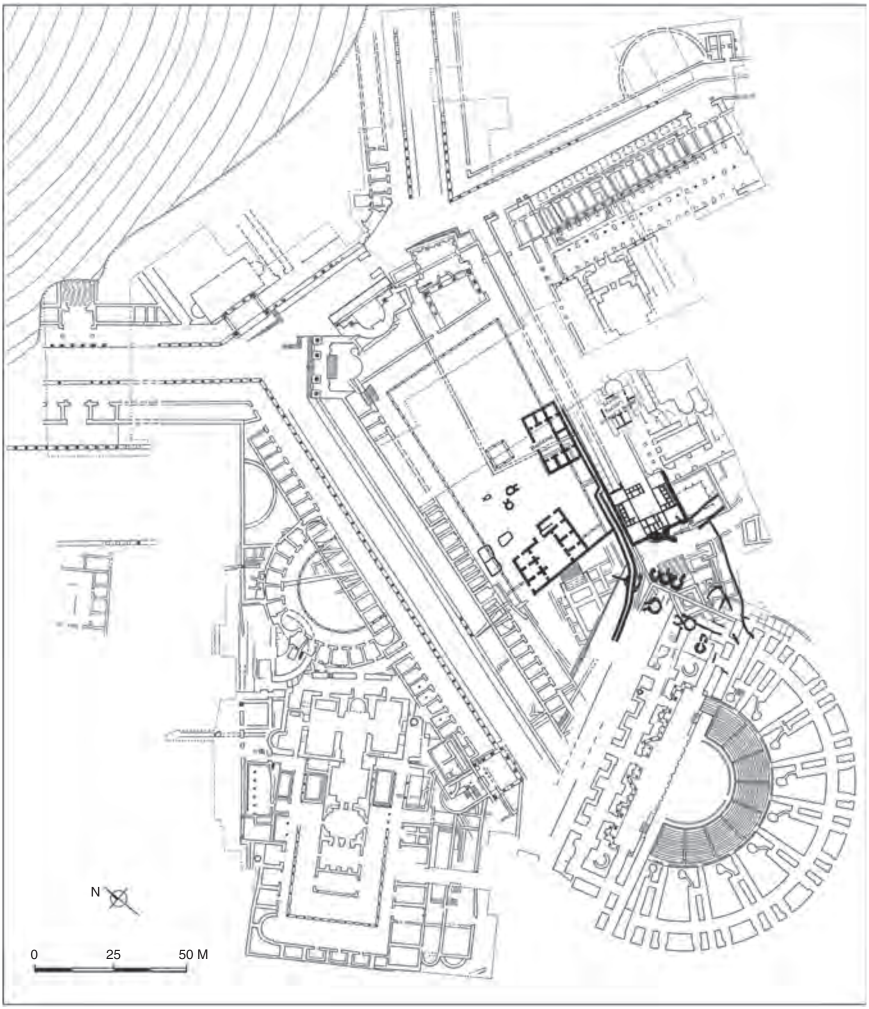
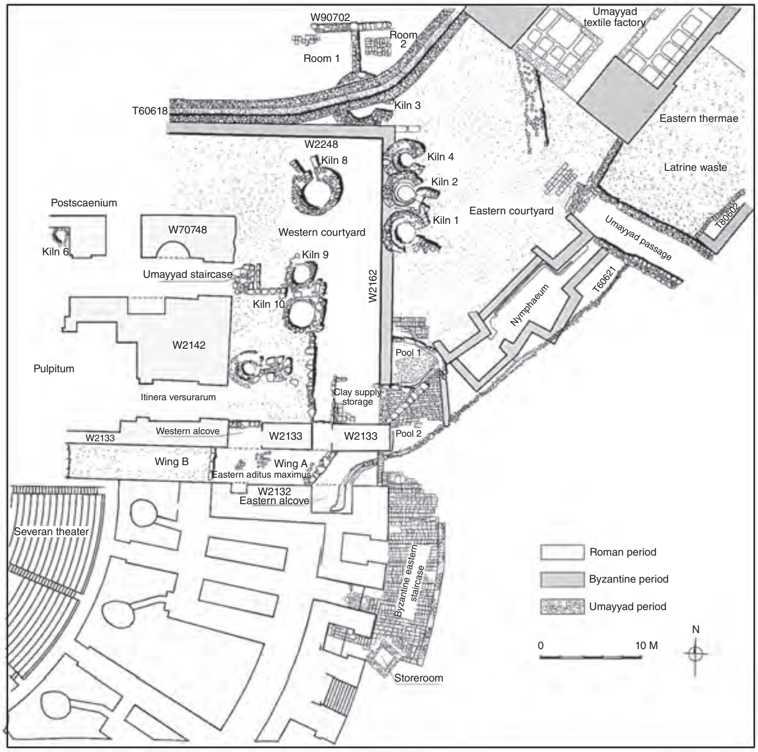


Fig. 3.14 Baysān: plan of Umayyad workshops. During the Umayyads, the development of these workshops over the remains of late Roman buildings (theatre, agora, and bath) went hand-in-hand with the process of clustering the artisans into specialized quarters. (Mazor, G., Bar-Nathan, R. 1998. Courtesy of the Israel Antiquities Authority)

(a)



(b)



Fig. 3.15 Baysān: Umayyad potters' workshop on the east side of the Roman theatre. (a) Plan after Mazor, G. 1989. (Courtesy of the Israel Antiquities Authority) (b) Detail of the kilns after Bar-Nathan, R., Atrash, W. 2011. (Courtesy of the Israel Antiquities Authority)

(a)
(b)

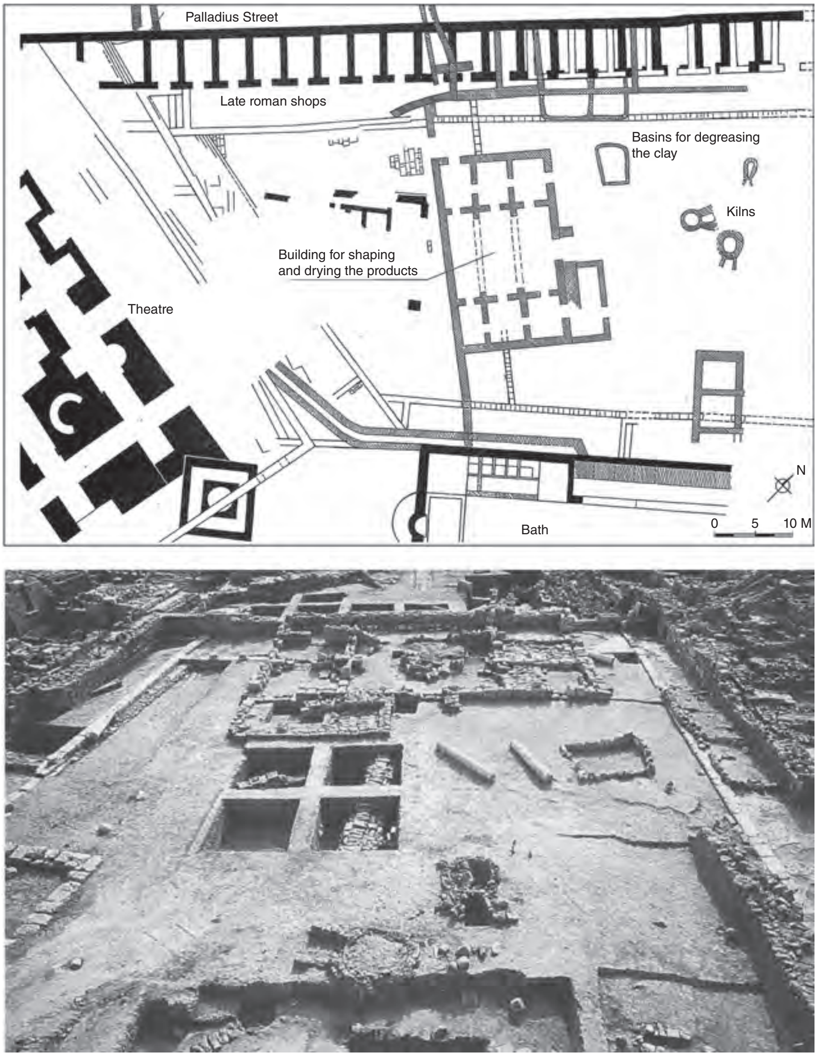


Fig. 3.16 Baysān: Umayyad potters' workshop of the agora. (a) Plan (b) Detail after Mazor, G., Bar-Nathan, R. 1998. (Courtesy of the Israel Antiquities Authority)



Fig. 3.17 Baysān: Umayyad dyers' workshop over the remains of a late Roman bath. Over the remains of these three marble pools, situated around the central courtyard that was accessed through the north-east entrance, were constructed six square basins, 1m deep and 1m wide, which were meant for cleaning wool material and fixing dyes. (© F. Bessard)

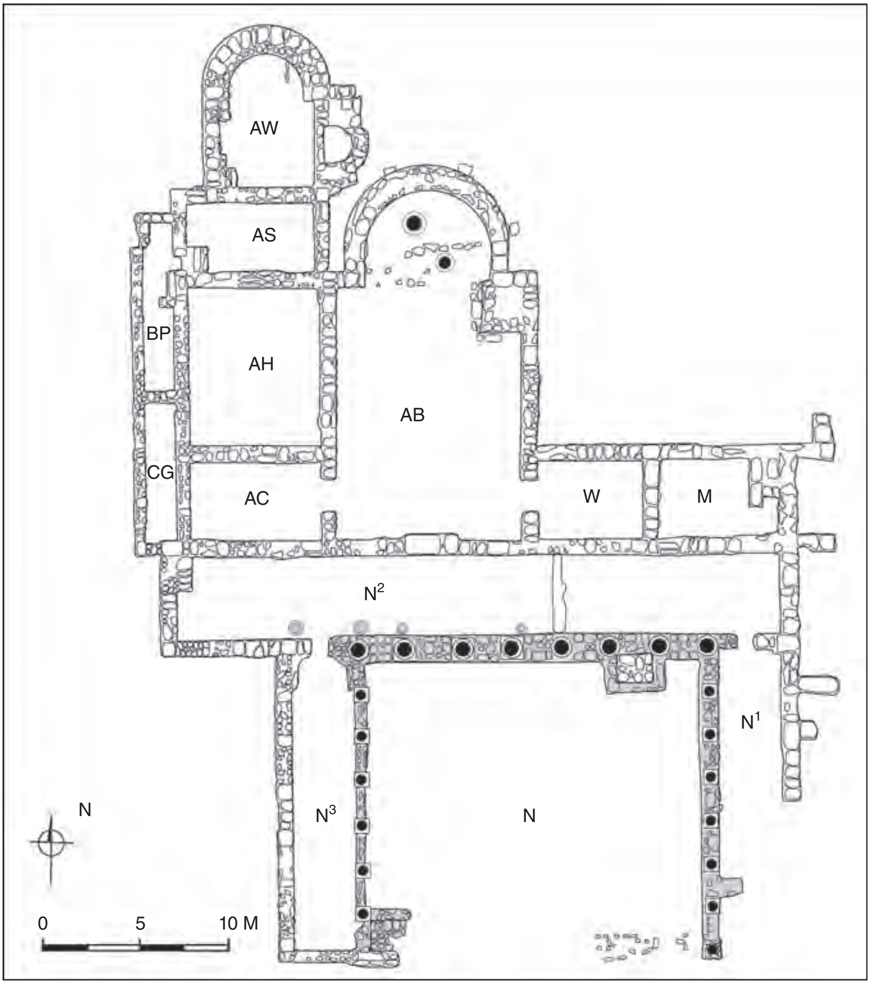


Fig. 3.18 Apamea: plan of the 'Triclinos House' in the south-east insula. The walls in grey were built in rubble to divide the large rooms and the monumental courtyard into smaller artisanal units, where late Umayyad silver coins, kilns, crucibles, and tools were unearthed. (After Jourdain, C. 1972)

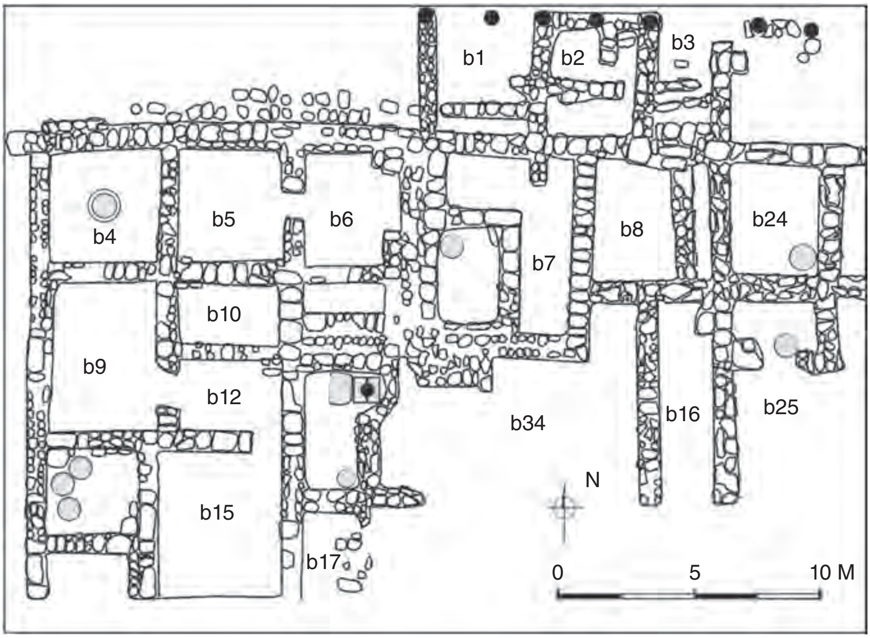


Fig. 3.19 Apamea: plan of the workshops established on the remains of the courtyard of the 'Triclinos House' during the Umayyads. In grey are the kilns and crucibles found. A row of shops (b1, 2, and 3) was erected between the south decumanus and the House on the late antique stoa. (After Jourdain, C. 1972)

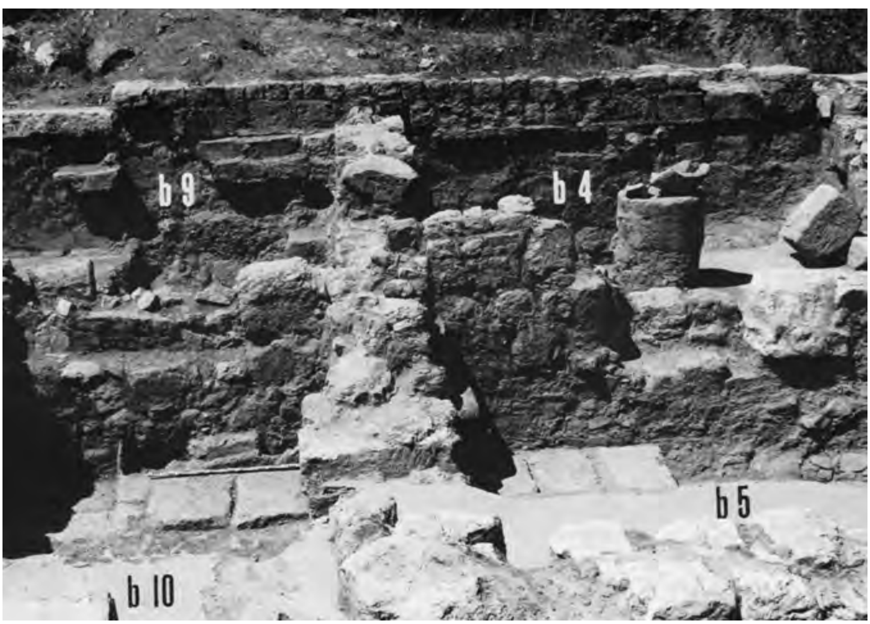


Fig. 3.20 Apamea: 'Triclinos House', detail of the workshops b4–5, 9–10. (Jourdain, C. 1972, fig. XXXVIII-1)

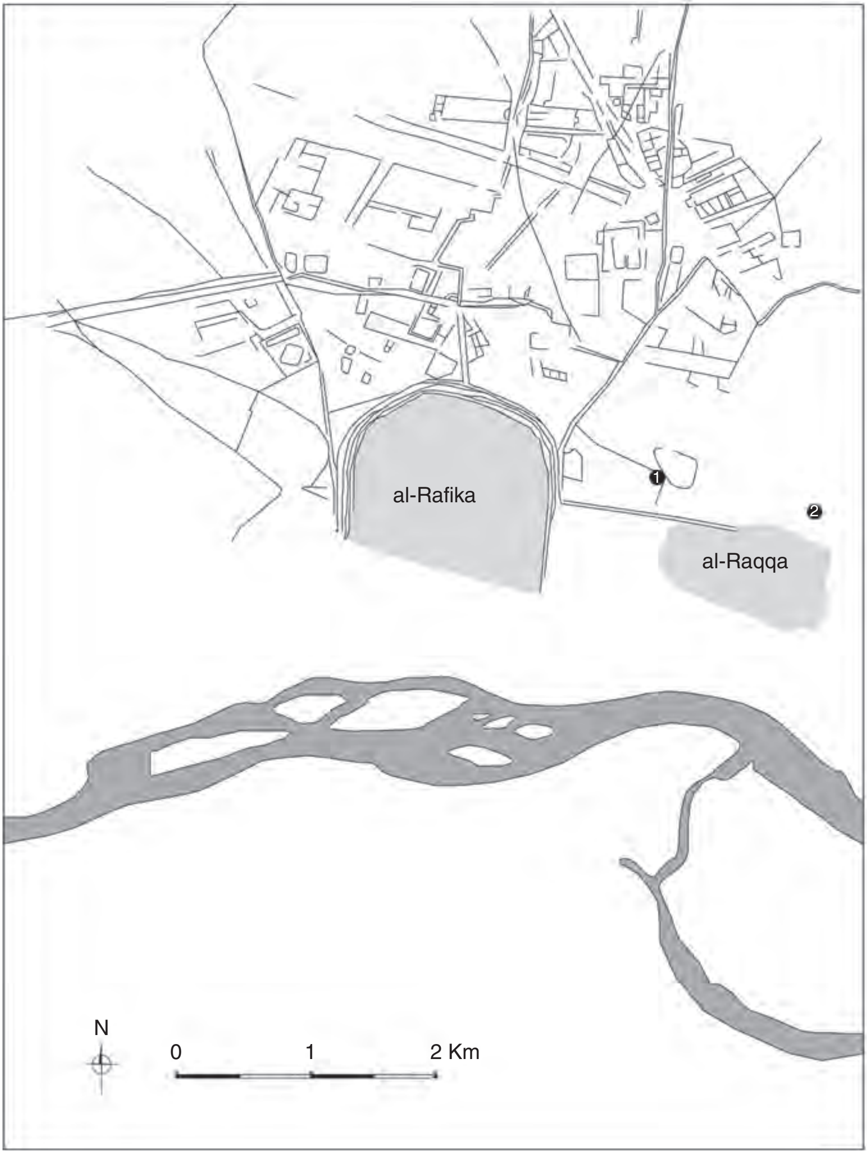


Fig. 3.21 Raqqa: map of al-Raqqa and al-Rafīqa, localizations of Tell al-zuǧāǧ (1) and Tell aswād (2). (J. Henderson 2005)

Conclusion to Part I

In certain respects, the development of urban retailing and crafts in the Near East from 700 to 950 was a *natural* response to the Muslim conquests, which joined up the late Roman and Persian trading zones. Still, it was not a self-generated process. Archaeological and textual sources reveal the prominent role that Muslim imperial authority played in the patronage of urban market and production spaces, possibly from as early as the late seventh century. While literary testimonies unanimously depict ʿAbbāsid sovereigns as more coercive in provincial life and the patronage of urban economy to support imperial propaganda, we can extrapolate from earlier accounts orally transmitted that caliphs and governors pursued an active investment policy as early as the rule of ʿAbd al-Malik in the late seventh and early eighth centuries.

This marked a fundamental difference between the early Islamic caliphate and Western Christendom, where Carolingian retailing and crafts remained very much a local affair, with the exception of the prosperous *emporia* of the North Sea. The economy in Carolingian Europe grew out of the independent initiative of prosperous individuals and was overseen by monasteries and aristocrats.[1] Shops and workshops were found in almost every borough, in the vicinities of abbeys,[2] such as St Denis, St Vaast, St Amand, and St Bertin, as well as at most major crossroads in the Frankish heartlands.[3] In western Europe, the organization of economic life was, therefore, largely in the hands of the elites, within a domanial economy.

In the Near East, this evolution of the patronal system favoured the increased distancing of professional life and domesticity, hitherto intertwined in late antiquity. It has been established that, from the late seventh century, crafts and retailing, which were originally scattered in the urban fabric in late

[1] VERHULST, A. (2002) *The Carolingian Economy* (Cambridge: Cambridge University Press) 90–1.

[2] VERHULST, A. (1995) 'Economic Organisation, Demographic Development', in *The New Cambridge Medieval History* (Cambridge: Cambridge University Press) 481–509.

[3] BRUAND, O. (2002) *Voyageurs et marchandises aux temps carolingiens. Les réseaux de communication entre Loire et Meuse aux VIIIe et IXe siècles* (Brussels: De Boeck Université) 145–6.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
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DOI: 10.1093/oso/9780198855828.001.0001

antiquity, appeared to be progressively ghettoized within communal working areas. These areas developed as economic quarters, near the city walls or in the immediate outskirts. The fortifications having lost their *raison d'être*, their vicinity became available as areas to concentrate and develop urban economic facilities. While the Islamic evidence presented here shows a continuation of the late antique model of ghettoizing urban economic activities, the scale of the phenomenon across the Near East and Central Asia shows that it was no longer a result of local practicalities but represent a concerted desire to standardize.

Part II

Revisiting the Legacies

4

Artisans to Producers

Archaeological and literary sources reveal that in the high-imperial and late Roman world, production remained largely in the hands of independent artisans with a small number of slave assistants or free apprentices. While there is evidence of Roman and late Roman manufactory-based industries (such as state *gynecea*, monastic manufactories in Dayr Samwīl in Palestine, as well as the vast fulleries and fish-salting and murex dye industries of Timgad in Algeria, and Sabratha and Euesperides in Libya[1]), the common model was for craftspeople to operate either in their own households or in household-sized urban *tabernae* or rural facilities.[2]

The archaeological remains of Pompeii and Timgad in Algeria reveal the extent to which Roman manufacturing was compartmentalized. Andrew Wilson,[3] who has published extensively on North African Roman industries, demonstrates, on the basis of material evidence from early-twentieth-century excavation clearance, that at Timgad the production of woollen garments rested on the labour of subcontracted degreasers, dyers, fullers, tailors, while women were spinning or weaving in the atria.[4] While most establishments

[1] WILSON, A. (2002) 'Urban production in the Roman world: the view from North Africa', *Papers of the British School at Rome* LXX: 231–73.

[2] In the late antique Near East, textual and archaeological sources have revealed that the urban economy was remarkably sophisticated, contrary to Max Weber and Moses Finley's theories. See WEBER, M. (1924) 'Agrärverhaltnisse in Altertum', in *Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte* (Tübingen: Mohr) 13; FINLEY, M. I. (1985) *The Ancient Economy* (second edition) (Berkeley: University of California Press).

[3] WILSON, A. (2004) 'Archaeological evidence for textile production and dyeing in Roman North Africa', in C. Alfaro, J. P. Wild, B. Costa (eds.) *Purpureae Vestes. I Symposium Internacional sobre Textiles y Tintes del Mediterranea en época romana* (Universitat de València) 155–64.

[4] Weaving and spinning are usually difficult to trace as spindles and loom weights are not always recorded during an excavation. When recorded, they are usually found in houses. For instance, in the Roman Egyptian village of Kellis, implements for spinning and weaving (spindles, spindle whorls, loom weights, shuttles, combs, and unspun yarn) were uncovered in almost every household. Cf. DROSS-KRÜPE, K. (2016) 'Roman Textile Crafts', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 338–9.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
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manufacturing and finishing cloth were grouped in the north-east quarter of Timgad, the discovery of separate and relatively small-sized workshops for fulling—with vats and sunken areas—or for dyeing—with heated vats—proves that production was both individual and divided. The same is true for bread-making in Pompeii. Among the thirty-nine Pompeian bakeries, examined by Nicolas Monteix,[5] not one presented all the sequences of breadmaking, from the milling of grain[6] to its tempering in salt water, kneading, and forming of loaves and the final baking. Milling was often completely separated from kneading and baking, which were by contrast often arranged in close proximity. This explains the lack of architectural uniformity in Pompeii Roman bakeries.

Whether the Roman subcontracting systems involved regular collaboration between a set group of artisans under one authority or short-term partnerships on an ad hoc basis remains unclear. Art historical evidence from a third-century funerary monument of northern Gaul, celebrating the achievements of the Secundinii brothers engaged in the wool industry, reveals that the nature of Roman production in the form of individual units and domestic workshops did not necessarily mean the absence of a 'capitalist' form of entrepreneurship.[7] Like medieval drapers, the Secundinii brothers were selling fabrics that they had produced by a coordinated workforce of spinners, weavers, fullers, and dyers paid by the piece. In this case, the subcontracting system involved a definite set of skilled artisans operating collaboratively on a regular basis, although not located under the same roof. The same may have happened in the building industry, with independent contractors or *conductors*—paid in two instalments—probably working with the same set of skilled workforce from their own *collegium* for complex construction projects.[8] The evidence thus shows that an embryonic form of integration in production did exist in at least some cases, but they remained the exception.

Cameron Hawkins argues that this high-imperial Roman model of disintegrated manufacturing (which finds a noticeable archaeological and epigraphic[9]

[5] MONTEIX, N. (2016) 'Contextualizing the Operational Sequence: Pompeian Bakeries as a Case Study', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 153–79.

[6] Grain was certainly milled in urban workshops as all watermills found around Pompeii date from after the destruction of the city.

[7] This is an idea stressed by Weber according to which the development of capitalism is based, among other factors, on the separation of production entreprise from the household and from considerations of kinship. This has been refuted by Banaji. See Banaji, J. [2001] 2007 *Agrarian Change in Late Antiquity. Gold, Labour, and Aristocratic Dominance* (Oxford: Oxford University Press) 69.

[8] For more on the status of contracted workers in the Roman world, see KEHOE, D. (2012), 'Contract Labor', in W. Scheidel (ed.) *The Cambridge Companion to the Roman Economy* (Cambridge: Cambridge University Press) 123–4.

[9] HAWKINS, C. (2012) 'Manufacturing', in W. Scheidel (ed.) *The Cambridge Companion to the Roman Economy* (Cambridge: Cambridge University Press) 179; funerary inscriptions from

illustration in remains of metal and textile industries) developed because of specific labour market conditions—the increasing price of slaves in particular—and the seasonal rhythm of economic life due to the yearly migration away from the city of the urban elite. It may have also resulted from the presence of an elite putting emphasis on land ownership rather than industries, although the evidence shows that landed proprietors could also practise a form of speculative manufacturing, such as estate owners along the Tiber or the Nora in Rome profiting from the local water and clay resources to set up market-orientated brick industries on their land in the first and second centuries.[10] Additionally, the existence of *collegia* made the development of integrated manufactories and its consequent organizational costs unnecessary, as entrepreneurs could find within their *collegium* reliable partners—for instance, the builders' association at Rome included hundreds of artisans specialized in the different aspects of the industry. In the Roman world, then, we see a performant and very sophisticated form of manufacturing already in place. However, there is no distinct form of global control or normalization of practices across the Mediterranean. In the Sasanian Empire, a similar pattern of artisanal life existed. Artisans carried out their profession in associations[11] from home or individual facilities, as discovered in Weh-Ardašīr, unless they belonged to royal workshops.[12]

The history of the working place in early Islam has never been prioritized as a field of study, as the focus has generally been put on the evolution of technologies in pottery,[13] glass,[14] and textile,[15] which led to a recognizable Islamic material culture. This offers an unfulfilled opportunity for a new approach to the history of production in the Near East from 700 to 950.[16] Were early medieval practices radically innovative or a continuation of past Roman and Sasanian practices? Was the increasing segregation of crafts in urban space (Chapter 3) detrimental to individual and family production within the domestic sphere? This chapter considers the physical change of the workspace chronologically, geographically, and by industry. From the case studies of pottery-, glass-, and textile-making, as well as food processing, it

the first/second centuries in Rome suggest that most craftspeople manufacturing metal ran workshops of their own.

[10] TCHERNIA, A. (2016) *The Romans and Trade* (Oxford: Oxford University Press) 11.

[11] TAFAZZOLI, A. (1974) 'A List of Trades and Crafts in the Sassanian Period', *AMI* 7: 191–6.

[12] PIGULEVSKAÏA, N.V. (1963) *Les villes de l'Etat iranien aux époques parthe et sassanide. Contribution à l'histoire sociale de la basse antiquité* (Paris: La-Haye) 160.

[13] WALMSLEY, A. (2001a) 'Turning East. The Appearance of Islamic Cream Ware in Jordan: the End of Antiquity?', in E. Villeneuve, P. Watson (eds.) *La céramique byzantine et proto-islamique en Syrie-Jordanie (IVe-VIIIe siècles ap. J.-C.)* (Beirut: Ifpo) 305–13.

[14] HENDERSON, J. (2013) *Ancient Glass* (Cambridge: Cambridge University Press).

[15] BAGINSKI A. et al. (2001) 'Textiles and Cordage from 'Avdat – the Cave of the Saints', *'Atiqot* 42: 243–60.

[16] SHATZMILLER, M. (1994) *Labour in the Medieval Islamic World* (Leiden: Brill).

discusses the standardization of the Roman practice, seen at Timgad in Africa, of zoning and conglomerating crafts in early Islam across the Near East and Central Asia. While acknowledging this continuity with the past, it examines the novelty and significance of manufacturing after 800, when 'post-Roman' ceased to be a meaningful description of Near Eastern economy, and questions whether urban crafts experienced differentiated or similar forms of development.

1. THE PROGRESSION OF CHANGE

1.1 Persistence of Roman practices after 700

In the late seventh and early eighth centuries, archaeological and textual evidence suggests no visible change in the existing form of manufacturing. Epigraphic sources from the eighth century indicate that independent craftsmanship remained the predominant form of labour in the early medieval Near East. By contrast, the practice of nucleating individual workshops was normalized relatively rapidly after the Arab-Muslim conquest; artisanal 'ghettos' developed in abandoned Roman monuments or on empty lands from 700 onwards. The medieval nucleated workshops perpetuated a Roman tradition attested to in Kent in Britain,[17] Sabratha in Libya, and Tyritake and Chersonese in Crimea.[18] They followed the same model, originally identified in the Roman world by David Peacock,[19] which shows a concentration in a common space of several identical and independent production units. There is numerous early-eighth-century evidence of artisanal ghettoization in the Levant. Several nucleated workshops, orientated towards the production of textiles, glass, metal, and pottery were uncovered, during the excavation of Jarash, Baysān, Apamea, Beirut, and Tyre, over the remains of monumental buildings belonging to the Roman era (hippodromes, temples, theatres, and baths) and the late antique period (cathedrals). These Greater Syrian early medieval workshops were found among Roman rubble, and illustrate a process of spolia of Roman architecture,[20] of privatization and conversion for new economic

[17] POLLARD, R.J. (1988) *The Roman Pottery of Kent* (Maidstone: Kent Archaeological Society).

[18] WILSON, A. (2002) 231–73.

[19] PEACOCK, D. P. S., WILLIAMS, D. F. (1986) *Amphorae and the Roman Economy* (London: Longman) 6–11.

[20] The reuse of Roman remains to establish new shops and workshops was the spontaneous continuation of a Byzantine practice of using spolia and converting pagan temples into churches, such as the Nabatean-Roman temple at Khirbet al-Darih and the Dionysus temple in Jarash. MUHEISEN, Z., VILLENEUVE, F. (1994) 'Découvertes nouvelles à Khirbet al-Darih (Jordanie) 1991–1994: autour du sanctuaire Nabatéan et Romain', *CRAI* 138(3): 735–57; (1997) 'Khirbet

purposes of both public and private buildings from antiquity. The ghettoization of workshops may have offered in some cases artisans more cost-effective working conditions—sharing raw materials, technological experience, and specialized skills—but the ghettoized medieval establishments were no more sophisticated or performant than their Roman predecessors.

1.2 Downfall of 'home' production after 800

The true rupture occurred after 800, when the model of production by specialized household-size units that was the norm in the Roman and late Roman world seemed to have declined. While it may have survived locally, literary documents from the ninth and tenth centuries show that it became supplanted by the emergence of large-scale manufactories. The disappearance of *collegia*, because Islamic law did not grant standing to self-governing entities and independent fraternities with a collective self-consciousness and identity, may have played a significant role in the emergence of integrated 'industries': deprived of collective support, many producers were forced to arrange for alternative means of assistance, abandoning home labour. However, most striking is the manner in which this evolution in manufacturing processes emerged as both a causal factor and symptom of a foundational transformation of power and the nature of the elites from the ninth century onwards. In the background of the decline in individual production and the development of integrated 'industries' is the socio-economic empowerment of enriched entrepreneurs *tuǧǧār* (see Chapter 9).

Their functioning relied on a division of labour already sporadically visible in the Roman world, such as in the large *fullonicae* of Pompeii or the late antique *gynecea*, but at a greater scale representing a growth when compared to late antiquity and the Umayyad period. Literary and material sources shed light on the impacts that the rise of integrated workshops had on the status of artisans and conditions of labour. The increasing division of tasks led the workers to develop more specialized skills to manufacture high-quality products. Besides, this model signified a real social improvement for a mass of workers who were based on a wage system. Nevertheless, it also included a relationship of dependency between workers and owners and a loss of individual creativity. The rise of nucleated workshops arguably contributed to the growth of collective identities at the expense of individual ones. While independent artisans continued to sign their work, the era of the Fatimids saw a

edh-Darih', *AJA* 101: 531–2; KRAELING, C. H. (1938) *Gerasa, City of the Decapolis* (New Haven: American Schools of Oriental Research) 37–63.

clear multiplication of collective workshop signatures on the underneath of lustre-painted vessels.[21] This is reminiscent of the situation in the fourteenth-century private glass workshops of Provence and Languedoc. While the artisans lost their title, becoming no more than employees, the merchants and owners designated themselves as glassmakers, without possessing any artisanal skills.[22]

2. APPROACHES TO KEY INDUSTRIES

The analysis of the remains of early medieval key industries can help us to define how this evolution in the artisanal practices materialized. Arguably, this model of evolution was not area-specific but seems to have become a norm across the caliphate. Although the Near East and its surrounding regions did not evolve synchronically, ceramic, glass, and textile production all witnessed a similar evolution, while there was no major revolution in food processing.

2.1 Pottery

The pottery production includes compelling evidence of the continuation and development of the Roman practice of nucleating individual workshops within artisanal quarters as early as the late seventh century. This manifested, for instance, in the Levant at Jarash and along the Jordan valley in Baysān-Bet She'an,[23] or next to the Orontes in Apamea.[24]

In the 1970s, the archaeologists engaged in the *Jerash Archaeological Project* and the exploration of the Roman past of old Jarash serendipitously unearthed a mass of evidence on the city's economic history during the transition between late antiquity and the early ʿAbbāsids. Yet, most discoveries remain unpublished and were only recorded in archives preserved in the Department

[21] WATSON, O. (2004) *Ceramics from Islamic Lands* (London: Thames & Hudson) 280.

[22] FOY, D. (2000a) 'Technologie, Géographie, Economie. Les ateliers de verriers primaires et secondaires en Occident. Esquisse d'une évolution de l'Antiquité au Moyen-âge', in *La Route du verre. Ateliers primaires et secondaires du second millénaire av. J.-C. au Moyen âge* (Lyon: Maison de l'Orient et de la Méditerranée) 166.

[23] AVNI, G. (2011) 'From Polis to Madina Revisited – Urban Change in Byzantine and Early Islamic Palestine', *The Journal of Royal Asiatic Society*, Series 3, 21(3): 301–29; BAR-NATHAN, R., ATRASH, W. (2011) *Bet She'an II. Baysân, the Theater Pottery Workshop* (Jerusalem: IAA).

[24] BALTY, J.-C. (1969) 'L'édifice dit au triclinos', in *Apamée de Syrie. Bilan des recherches archéologiques 1965–1968* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 105–16; JOURDAIN, C. (1972) 'Sondages dans l'insula au triclinos, 1970 et 1971', in *Colloque Apamée de Syrie, Bilan des recherches archéologiques 1969–1971* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 113–42.

of Antiquities (DoA) in ʿAmmān in Jordan. Interestingly, the evidence collected revealed the abandonment of individual workshops in the post-Roman world, such as the fifth-century pottery workshop of the Church of St Theodore[25] or the late Roman dyer's workshop of the *macellum*.[26] These facilities fell into disuse, as the local activities of production were concentrated in specialized quarters[27] and the artisans began to work in collective workshops. Potters established themselves between the late seventh and the early eighth century in the north of the city, in the north theatre[28] and the Temple of Artemis,[29] as well as in the south, in the Temple of Zeus. These pottery workshops distinguished themselves by their production capacity. They hosted three to five kilns of exceptional dimensions; such as the large kiln A[30] (diam. 7m) in the Temple of Artemis (figs. 4.1 and 4.2), built in a combination of ways, sometimes reusing the Roman structure. They presented technical particularities, which suggest the coexistence of artisans with specialized skills and a diversified input.

The development of the nucleated workshops in Jarash, at the expense of individual artisanal facilities, lay in the very choice of places in which they were housed, places that offered architectural solutions for increasing the size of the production tools themselves. The Roman buildings taken over by the craft industry at the beginning of the Middle Ages provided all the stone necessary for equipping the medieval nucleated pottery workshops with more stable and solid installations. This can be observed in the reuse of antique architectural elements and blocks to build the circular walls surrounding the Umayyad kilns. The use of these spolia as building materials, therefore, helped to reinforce the rusticity of their equipment and limited repairs, allowing the potters to build kilns on the previously unrealizable scale of those in the Temple of Artemis. Artisans made use of whole expanses of walls among the Roman remains to improve the stability and insulation of their equipment. In many instances, the potters built their kilns right up against the sturdiest walls of these Roman buildings—hefty walls made out of large blocks of stone—that afforded the installations involved in the firing process greater stability and insulation. The potters of the sanctuary of Zeus thus improved the quality of the kiln on the south-west corner of the lower terrace by digging its heating

[25] FISHER, C. S. (1938b) 'Area West of St. Theordore's', in C. H. Kraeling (ed.) *Gerasa, City of the Decapolis* (New Haven: American Schools of Oriental Research) 284.

[26] USCATESCU, A., MARTIN-BUENO, M. (1997) 'The Macellum of Gerasa (Jerash, Jordan): From a Market Place to an Industrial Area', *BASOR* 307: 67–88.

[27] See Chapter 1. On the separation of artisanal and domestic life in Umayyad Jarash, see also GAWLIKOWSKI, M. (1986) 'A Residential Area by the South Decumanus', *JAP* 1: 107–21.

[28] SCHAEFER, J. (1986) 'An Umayyad Potters' Complex in the North Theatre, Jerash', *JAP* 1: 411–49.

[29] PIEROBON, R. (1986) 'The Area of the Kilns', *JAP* 1: 184–7.

[30] PIEROBON, R. (1983–4) 'Sanctuary of Artemis: Soundings in the Temple-Terrace, 1978–1980', *Mesopotamia* 18(9): 85–111; (1986) 184–7.

chamber into the rocky substratum and fitting the floor of its firing chamber into the paving blocks of the courtyard.

Barbalissos-Bālis along the Euphrates demonstrates that this established norm of ghettoization of independent artisans under the Umayyads progressed under the early ʿAbbāsids, but was now accompanied by an occupation of city suburbs. After the Arab-Muslim conquest of 636, Barbalissos-Bālis flourished continuously up to the tenth century, being described by the tenth-century geographer Ibn Ḥawqal as the major entrepôt in the Levant (*furḍa al-Šām)*.[31] From the ninth century, its economy included an exceptional ceramic industry that persisted up to the Ayyubid rule. Traces of this pottery production in the early ʿAbbāsid caliphate have been unearthed in 1973–4. Jacques Thiriot's surveys and excavations revealed that ninth-century potters were grouped in the southern suburb of Bālis (figs. 4.3 and 4.4). This pottery quarter extended along the Euphrates, which provided water and raw material (clay from the river alluvium and reeds used as fuel). Geophysical explorations confirmed the presence of some eleven kilns over 600m^2 along with shaped ash *tells* containing an abundance of waste. The semi-buried kilns were of rectangular shape, as the contemporary kilns of Ta'as[32] and Raqqa,[33] consisting of a heating chamber covered with arches made of baked bricks, laid in a vertical position, supporting the floor breakthrough flue of a firing chamber, made of horizontal bricks tied with clay mortar, where the ceramics were fired (see kiln 2f, Appendix 5). The kilns were domed. Access to the heating chamber was through a semi-underground room built roughly from composite materials and covered with reeds during the firing process.

Evidence suggests production was centred in a common space, but without any integrated system of work or management. The excavation has demonstrated that the kilns were not built on the same axis. They were oriented instead according to the workshop upon which they depended. Some of the workshops were provided with their own equipment for cleaning clay and tools to shape the pottery and decorate it, whereas others only included kilns. Thus, in the southern suburb was revealed next to the kiln 2E a workspace including five jars, in a semi-circle, which were most likely used for preparing the clay (fig. 4.5). Broken up into small chunks, the clay was put into these semi-buried jars to be cleaned of impurities. The circular arrangement of these jars provides insight into the labour conditions of the artisans, who would work in a squatting position, with their own set of tools and equipment nearby

[31] IBN ḤAWQAL (1939), *Kitāb ṣūrat al-arḍ* (Leiden: Brill) 180.

[32] VAN DER LEEUW, S. E. (1976) *Studies in the Technology of Ancient Pottery* (Amsterdam: University of Amsterdam) 229–34.

[33] HENDERSON, J., TONGHINI, C. (1998) 'An Eleventh Century Pottery Production Workshop at al-Raqqa. Preliminary Rapport', *Levant* 30: 113–27; J. HENDERSON et al. (2005) 'Experiment and Innovation: Early Islamic Industry at al-Raqqa, Syria', *Antiquity* 79: 130–45.

to produce pottery efficiently with minimum discomfort. Archaeological remains therefore highlight the existence of an artisanal cluster, which emerged as a group of workshops working independently from each other.

The decline of an isolated way of producing ceramic is even more obvious in the cities founded after the Islamic conquests, where archaeology demonstrates that potters were forcibly confined in nucleated workshops within strategic empty spaces, where raw materials could be easily transported and their growth not restricted. At Ayla, the excavations conducted in 1973 by Baseem Rihani from the Department of Antiquities of Petra,[34] and then in 1993 by Donald Whitcomb,[35] have shown that the growth of the early Islamic port of Ayla led to the emergence of a potters' complex in the northern suburb (fig. 4.6). Five agglomerated circular updraft kilns (over 3m in diameter) were uncovered (figs. 4.7 and 4.8 a/b). Oval in shape, these vertical shaft kilns measured between 2.6m and 3.5m and were built of mud brick. They included a heating chamber covered with transverse arches that supported the floor breakthrough flue of a firing chamber. The latter was surmounted by an opened dome to permit the release of fumes. Along the inside walls, the intensity of the fire has fused the clay coating, lining the bricks of the wall, which melted before the kiln was definitively abandoned. Ample traces of rubefaction and vitrification thus survived, attesting to the intensive use of the kilns. The dumps show that the potters' complex met far more than domestic consumption, as evidence of large-scale production of specialized amphorae for ship holds was also found. The eighth and ninth centuries witnessed a significant increase in Red Sea exchange, compared with the fifth to seventh centuries, and several fragments of Ayla amphora, used as containers for grain and oil, have been identified at Adulis[36] and Axum in Ethiopia.[37] This reveals that nucleated workshops were designed to ensure a large-scale production of goods and that the diffusion of this model responded to major changes in local economic strategies after the rise of Islam.

The development of nucleated workshops of pottery from the late seventh century was therefore not area-specific, but manifested across the Near East,

[34] MELOY, J. L. (1991) 'Results of Archaeological Reconnaissance in West Aqaba. Evidence of the Pre-Islamic Settlement', *ADAJ* 35: 397–414.

[35] MELKAWI, A., 'AMR, K., WHITCOMB, D. (1994) 'The Excavation of Two Seventh Century Pottery Kilns at Aqaba', *ADAJ* 38: 447–68; WHITCOMB, D. (1994c) 'Water and Recent Excavations at Aqaba', *The Oriental Institute News and Notes* 141: 1–5; (1994a) *Ayla, Art and Industry in the Islamic Port of Aqaba* (Chicago: The Oriental Institute); (2001c) 'Amphora Production at Aqaba and its Implications', in E. Villeneuve, P. Watson (eds.) *La céramique byzantine et proto-islamique en Syrie-Jordanie (IVe-VIIIe siècles)* (Beirut: Ifpo) 297–303.

[36] PARIBENI, R. (1908) 'Ricerche nel logo dell' antica Adulis', *Monumenti Antichi* 18: 437–572; ANFRAY, F. (1965) 'Chronique archéologique 1960-64', *Annales d'Ethiopie* 6: 3–48.

[37] MUNRO-HAY, S. C. (1989) *Excavations at Axum* (London: British Institute in Eastern Africa) 314.

both in late antique and medieval towns. This communal way of producing was already in practice in late antiquity and simply spread after the rise of Islam. Continuity in labour was palpable up to the mid ninth century, when a new model of production arose, based on an embryonic form of the division of labour. Evidence is scarce but can be found in the ninth-century glazed ceramic workshop, discovered in 1970 by Eliezer Oren in Tiberias (figs. 4.9 and 4.10). In this workshop, the processes of producing the pottery and glazing it were henceforth physically separated and took place in distinctive buildings. One of them was dedicated to the preparation of clay, pottery-making, and firing, as evidenced by the unearthing of tools and a baked brick kiln in 1991.[38] Within and around it, pottery waste was found (bowls, jars, and amphorae), as well as fragments of kiln bars showing traces of vitrification.[39] A neighbouring building was dedicated to glazing.[40] This latter comprised nine large paved rooms, supplied with water by a sophisticated complex of channels. Its particular function was confirmed by the discovery of storage jars, cooking pots and a pot containing around 13 kilogrammes of pigments for glazing, as well as fragments of glazed artefacts.

Archaeological remains of this integrated mode of manufacturing ceramic can also be found in Central Asia, where pottery production was a dynamic sector of the local economy in the ninth to thirteenth centuries. Remains of pottery complexes characterized by a similar division of labour, but on a much greater scale, have been unearthed in Merv and recently Paykand. The site of Paykand lies in the Oasis of Buẖāra, in the south of a fertile zone irrigated by the Zarafshan river, which from the mountains of the Pamir spilled into the Amu Darya. The site includes a citadel overlooking the fortified pre-Islamic Shahrestan and medieval outskirts.[41] Recent excavations of the western outskirts led to the discovery of a large medieval potters' quarter along the western and eastern levees of a branch of the Zarafshan and a *ribāṭ* zone, stretching over 61 hectares. In the 1970s, the enlargement of the river significantly damaged the potters' quarter. Their premises along the east bank of the canal are now only visible in cross section. Stretching along the west bank, on the other hand, geophysical surveys in 2011 revealed the boundaries of the quarter. Spreading out over an area of around 320m² or so, the surveys

[38] STERN, E. J. (1995) 'An Early Islamic Kiln in Tiberias', *'Atiqot* 26: 57–9.

[39] DAMATI, E. (1993) 'Tiberias, Kiln', *HA* 99: 101.

[40] OREN, E. (1971) 'Early Islamic Material From Ganei-Hamat (Tiberias)', *Archaeology* 24 (3): 274–7.

[41] MIRZAAHMEDOV, D. (2004) *Sotsial'no-ekonomicheskoi istorii Buhary vtoroi poloviny* XII (Samarkand: coll. Arheologiyaiistoriya Tsentral'noi Azii); RANTE, R., RAIMKULOV, A. (2013) 'Les fouilles de Paykend: nouveaux éléments', in J. Bendezu-Sarmiento (ed.) *25 ans d'archéologie française en Asie Centrale. Nouvelles méthodes, nouvelles perspectives* (Paris: De Boccard) 237–60.

showed anomalies, evidence of kilns, and magnetic concentrations due to a significant accumulation of pottery waste. The excavation of the remains revealed that the artisanal quarter was occupied continuously for over five centuries, from the ninth to the decline of the town in the thirteenth. This time span has been measured thanks to carbon-14 and thermoluminescence dating, as well as the analysis of the stratigraphy and the ceramics from sealed archaeological contexts: kilns' ash pits and pottery waste which represent thousands of shards near the furnaces, as well as *in situ* ash deposits within the kilns.

Evidence suggests that the activities were divided into two specialized areas. Shaping of pottery took place in independent plots, which hosted basins for the decantation of clay and areas for making wheel-turned ceramics. An ensemble of nine potter's wheels was unearthed, whose use is attested by the presence of sockets in which the spindles of the wheels were fitted, as well as of *in situ* unfired clay and fragments of unfired ceramics in the pit wheels. Two systems of wheels have been discovered, one with the option of a pierced, buried bone used as a support for the vertical spindle of the wheel, which now appears to have been unique to Paykand, and a more classical option with a socket fixed to the centre of the pit. Various tools used to decorate the ceramics were also unearthed, such as stamps for the decoration of the lids of jugs, dozens of clay rings used to attach the lids to the handles of jugs, incised pellets that were applied on the body and ribs of the potteries, and several small punches used to create incised decorative patterns.

The activity of firing clay was separated from the shaping of pottery and took place primarily on the south, in a zone that showed a high concentration of kilns where furnace material has been excavated (rods and hooks bearing traces of vitrification). Several types of furnaces have been identified, ranging from small circular, oval, or rectangular kilns to large circular kilns with or without pillars, as well as a massive rectangular kiln with arches. These last types of kilns were supposedly built as the result of some form of technical innovation in progress during the eleventh and twelfth centuries and would correspond to a greater loading capacity, and may indicate a diversification of activity.

This two-phase evolution of labour, perceptible in the ceramic industry in the medieval world, illustrates the continuity and systematization of the late antique model of nucleated production after the rise of Islam. From the end of the seventh to the early ninth century, it became preponderant in most Near Eastern cities to the detriment of individual production. Yet, the ninth century witnessed a rupture in the traditional labour patterns, through the development of integrated manufacturing that was distinguished by the extent of the equipment and the arrangements in differentiating clusters of the production process (degreasing of clay, shaping, baking, drying of products) and sales activities.

2.2 Glassmaking

In the glassmaking sector, collective manufactories already existed in the Roman world.[42] The Levantine coast and Egypt have a long tradition of primary glassmaking that was perpetuated after the rise of Islam, and the early medieval nucleated workshops unearthed in Samaria at Apollonia, Dor, Bet She'arim, and Bet Eli'ezer (Hadera) functioned as the well-established Roman industries. Almost all of them comprised large series of massive tank furnaces. At Bet Eli'ezer, located near Caesarea, around seventeen furnaces up to 4.5m long and 2.5m wide, able to produce enormous quantities of raw glass in a single firing, were excavated (fig. 4.11).[43] At Bet She'arim, the furnaces of the workshop, which were supposedly built in early Islam on the remains of a Jewish necropolis dated to the second to fourth centuries, have long since ceased to exist.[44] Yet, in 1960, Benjamin Mazar and Nahman Avigad identified archaeological traces, which led them to speculate on the probable size of the manufactory. The archaeologists uncovered a 9-ton slab of glass that was dated by Ian Freestone and Yael Gorin-Rosen to the end of the eighth century.[45] The size of the slab (3.80m long, 1.95m wide, 0.45m deep) and its weight confirm that the craftspeople used highly sophisticated and large-scale furnaces. This, however, was not a new development as primary glass furnaces of similar or larger size to the Bet Eli'ezer furnaces are known from the second and third centuries in the Levant and Egypt.

At Tyre, the emergence of a collective primary glassmaking workshop on the Roman model in the tenth century led to the decline of previous individual production.[46] A collective primary glass workshop was discovered in the area

[42] Palestinian glasswares were widely distributed throughout the Mediterranean and Europe in the late Roman era. See in particular SAFRAI, Z. (1994) *The Economy of Roman Palestine* (New York: Routledge) 203; OPPENHEIM, L. (1970) *Glass and Glassmaking in Ancient Mesopotamia* (New York: Corning) 154–71. For more on Roman and late antique glass production and trade, see the publications by D. Foy and M.-D. Nenna: for instance, FOY, D. and NENNA, M.-D. (2003) *Échanges et commerce du verre dans le monde antique: Actes du colloque international de l'Association Française pour l'Archéologie du Verre*, Aix-en-Provence et Marseille, juin 2001 (Montagnac: Monographies Intrumentum 24).

[43] GORIN-ROSEN, Y. (1995) 'Hadera, Bet Eli'ezer', *ESI* 13: 42–3; (2000) 'The Ancient Glass Industry in Israel: Summary of the Finds and New Discoveries', in *La route du verre. Ateliers primaires et secondaires de verriers du second millénaire av. J.-C. au Moyen-Âge* (Lyon: Maison de l'Orient et de la Méditerranée) 52–3; FREESTONE I. et al. (2000) 'Primary Glass from Israel and the Production of Glass in Late Antiquity and the Early Islamic Period', in *La route du verre. Ateliers primaires et secondaires de verriers du second millénaire av. J.-C. au Moyen-Âge* (Lyon: Maison de l'Orient et de la Méditerranée) 67; HENDERSON, J. (2013) *Ancient Glass* (Cambridge: Cambridge University Press) 270–1.

[44] BRILL, R. H., WOSINSKI, J. (1965) 'A Huge Slab of Glass in the Ancient Necropolis of Bet She'arim', *Comptes rendus du VIIe congrès international du verre* (Brussels) 211–19.

[45] FREESTONE, I., GORIN-ROSEN, Y., HUGHES, M. J. (1999) 'The Great Glass Slab of Bet Shearim, an Early Islamic Glass-Making Experiment?', *Journal of Glass Studies* 41: 105–16.

[46] ALDSWORTH, F., HAGGARTY, G., JENNINGS, S., WHITEHOUSE, D. (2002) 'Medieval Glassmaking at Tyre, Lebanon', *Journal of Glass Studies* 44: 49–66; (2001) 'The Glassmaking area on the Island Site at Tyre, Southern Lebanon', *BAAL* 5: 219–39.

to the south-east of the Cipollino columns bordering the street leading to the port of the city (fig. 4.12). Built among the paved and standing remains of Roman edifices, it hosted four furnaces, even larger than those excavated at Hadera in Israel. Furnace 1 (fig. 4.13) included a large melting chamber (5.90m by 3.90m), whose floor and walls were covered with mortar. On the east end of the tank floor, traces of successive phases of mortar lining, attesting to its intensive use and repair, could be identified alongside evidence of three layers of green glass against the vitrified surface of the side walls (fig. 4.14). The furnace comprised two firing chambers at the eastern end. Furnace 2 (Appendix 32–3), of smaller dimensions (4.50m by 2.20m), included a similar large melting tank, characterized by its floor in mortar and walls damaged by glass fragments. Its twin firing chambers, on the western side of the melting tank, were separated by a central wall of rectangular white limestone blocks most likely reused from Roman buildings. Furnaces 3 and 4 were discovered largely destroyed. They were the least well preserved, partly investigated because of the fragile nature of the surviving structures. The excavation of the glassmaking facility suggests that the furnaces were built generally in a similar fashion. The orientation of their firing chambers differed, however. The archaeologists supposed that this was due to the site being an island, so prevailing wind was not critical, and the glassmakers could arrange the furnace at their convenience. The presence of debris of green, blue, cobalt, violet, and white raw glass indicates that a very diverse range of base materials was manufactured.

Raw glass was stored in baskets, to be sold to glass-blowing workshops, such as in Beirut and Tyre. In early Islam, secondary glassmaking experienced the same perpetuation and normalization of a Roman model of collective labour. In Beirut, an eighth-century communal workshop was found by Danièle Foy[47] during her investigation of the Bey 002 sector near Martyr Square (figs. 4.15 and 4.16). The workshop rested on the ruins of a late Roman residential area.[48] It was identified thanks to the presence of deformed ribbons, threads, drops carrying traces of scissors, and dumps of waste glass, dating from the beginning of the eighth century (stemmed lamps, goblets, flagons, jugs, drinking glasses). Alongside these were fragments of bricks, tegulae, and cooked clay, which were covered by a layer of uniform glass. The abundance of glass fragments, and the remains of furnace walls and backs exhumed, confirmed the large scale of the manufactory, whose production presumably exceeded local consumption. The discovery of additional evidence of secondary glassmaking in neighbouring sectors (Bey 004[49] and Bey 069[50]) indicates that the Bey 002 workshop functioned within a specialized artisanal quarter. This

[47] KOWATLI I. et al. (2006) 'A Pottery and Glass Production Site in Beirut (Bey 015)', *BAAL* 10: 103–18.

[48] FOY, D. (1996) 'Bey 002: les verres', *BAAL* 1: 90–7; (2000b) 'Un atelier de verrier à Beyrouth au début de la conquête islamique', *Syria* 77: 239–90.

[49] SAGHIEH, M. (1996) 'Bey 001, Bey 004, rapport préliminaire', *BAAL* 1: 38–40.

[50] BOUZEK, J. (1996) 'Bey 069, sondage A', *BAAL* 1: 137, 146.

increased production of glass may have resulted from a shift in trade after the rise of Islam according to Paul Reynolds. In his study of the economy of Umayyad Beirut, he argues that the port developed new commercial connections with the Aegean world and Byzantium from 700. His analysis of the pottery assemblage from the Roman imperial baths (Bey 045) highlights that Gaza and Caesarea amphora types, used to store oil and wine in late antiquity and found in large quantity in the baths' late antique deposits, were almost absent in the early medieval archaeological strata. By contrast, Egyptian, Anatolian, and Cypriot ceramics would be found in abundance among the baths' Umayyad remains. Beirut's increasing commercial relationship with the Aegean Islands and Byzantium in early Islam may well have given the impetus for the development of its production, notably its glass industry.[51]

The real departure from late antiquity occurred *c.*800, when the production became less localized and established in semi-desert inland environments, such as in al-Raqqa, Qādisiyya, and Sāmarrā. The borrowing of the Sasanian plant ash technology enabled a more distributed primary production, which did not require the natron and particular sands of the Levant. Raqqa experienced a significant prosperity under the ʿAbbāsids. It grew especially when al-Manṣūr built nearby the Islamic settlement of Rāfiqa in 771, and Hārūn al-Rašīd, fleeing Bagdad, settled there in 796.[52] Excavations undertaken by Michael Meinecke in 1982–93 and Julian Henderson in 1992–6, in the modern suburb of Mishlab,[53] have revealed the existence of a ninth- to eleventh-century artisanal quarter, in the north of Raqqa and the eastern side of al-Rāfiqa, including remains of pottery workshops (Tell aswād—Appendix 29), and glassmaking and stucco industries (Tell al-zuǧāǧ). The glassmaking complex (Tell al-zuǧāǧ)[54] supported the complete process of primary and

[51] REYNOLDS, P. (2003) 'Pottery and the Economy in the 8th century Beirut: An Umayyad Pottery Assemblage from the Roman Imperial Baths (Bey 045)', in *VIIe Congrès international sur la céramique médiévale en Méditerranée* (Athens: Édition de la caisse des recettes archéologiques) 725–34.

[52] MEINECKE, M., HEUSCH, J.-C. (1985) 'Grabungen im ʿabbāsidischen Palastareal von ar-Raqqa/ar-Rafiqa', *DamMitt* 2: 85–105; (1995) 'Raqqa on the Euphrates: Recent Excavations at the Residence of Hārūn al-Rašīd', in S. Kerner (ed.) *The Near East in Antiquity* 2 ('Ammān: Goethe Institute) 17–32; (1994) 'al-Raḳḳa', *EI* 7: 410–14.

[53] HENDERSON, J., CHALLIS, K., O'HARA, S., McLOUGHLIN, S., GARDNER, A., PRIESTNALL, G. (2002) 'The Raqqa Ancient Industry Project', *Antiquity* 76: 33–4.

[54] KHALIL, I., HENDERSON, J. (2011) 'An Interim Report on New Evidence for Early Islamic Glass Production at al-Raqqa, Northern Syria', *Journal of Glass Studies* 53: 237–42; HENDERSON, J. (1996) 'New Light on Early Islamic Industry: Excavations in Raqqa, Syria', in R. J. A. Wilson (ed.) *From River Trent to Raqqa, Nottingham University Archaeological Fieldwork in Britain, Europe and the Middle East, 1991–1995* (Nottingham: University of Nottingham) 59–71; (1999) 'Archaeological and Scientific Evidence for the Production of Early Islamic Glass in al-Raqqa, Syria', *Levant* 31: 225–40; HENDERSON, J., TONGHINI, C. (1998) 'An Eleventh Century Pottery Production Workshop at al-Raqqa. Preliminary Rapport', *Levant* 30: 113–27; HENDERSON J. et al. (2005) 'Experiment and Innovation: Early Islamic Industry at al-Raqqa, Syria', *Antiquity* 79: 130–45.

secondary production (fig. 4.17).[55] Compelling evidence for glassmaking and glass-blowing came in the form of raw glass blocks attached to tank furnace fragments and fragments of semi-vitrified frit. The workshops also hosted three beehive-shaped furnaces, next to glass vessel fragments, pulls of glass, rods of glass, dribbles, drops, raw glass of various colours, glass moils, fragments of crucible, and trays used for casting glass blocks. All of the furnaces naturally faced towards the centre of the glass workshop and comprised a firing chamber filled with ash and charcoal, supporting two heating chambers used to heat up and fuse the raw glass in crucibles before blowing it. According to stratigraphic data, the four furnaces may have worked at the same time to produce a large volume of glass. It can be supposed that the workshop hosted skilled workers, capable of making glass using various pigments as well as blowing it. This labour force certainly worked in difficult conditions of close proximity, as suggested by the layout of the workshop. The necessity of different gaseous atmospheres in each furnace to produce the wide variety of glass artefacts implies that the workers were arguably subordinate to an individual who controlled the different phases of production and probably sold its output. Julian Henderson's investigations have revealed that the growth of the glass complex of Raqqa was the result of the reintroduction of sodium-rich plant ash, instead of Egyptian natron. No longer reliant on this material, Near Eastern glass-making workshops could develop inland in the ninth century.[56] It can be argued that this technological upheaval favoured the growth of a new way of producing glass: the birth of production centres, where glass could be manufactured and blown in one integrated unit.

The difference with the Roman period does not lie here in the quantity produced but the geography of glassmaking. Arguably, the ninth century also saw a change in the nature of the production process with the development of facilities, covering the entire cycle of glass manufacture. This claim nevertheless is only supported by evidence from al-Raqqa. In Iraq, excavations at Qādisiyya and Sāmarrā have produced remains of glass-working but with no furnace. While the change in technologies may well have led to an evolution in the nature of labour, it is also possible that our view is distorted and that al-Raqqa's industry, whose production of glass floor tiles, carved cold glass, and glass mosaics was almost entirely dedicated to imperial building, was always the only workshop of its kind.

[55] HENDERSON, J. (1994) 'An Investigation of Early Islamic Glass Production in al-Raqqa, Syria', in *Issues in Art and Archaeology, Materials Research Society Proceedings* 3 (Mexico: P. Vandiver) 433–44; HENDERSON J. et al. (2005) 130–45.

[56] HENDERSON, J. (2013) 370.

2.3 Textile industry

The textile industry appears as a sector, in which the nature of production evolved differently in the imperial and domestic environment. The lack of archaeological and literary evidence, compared to industries more visible physically such as ceramic or glass, makes it sometimes difficult to discern the significance of the changes that occurred between the Byzantine and ultimately Roman era and early Islam. Nevertheless, suggestions can be made.

At court, the late Roman tradition of imperial textile factories continued to operate after the rise of Islam to produce the royal *ṭirāz*. While the practice was perpetuated, we have, however, no evidence regarding the functioning of imperial *ṭirāz* workshops to compare and contrast with the *gynecea*. The earliest archaeological proof of the perpetuation after the rise of Islam of an imperial production of textiles in the Near East dates from the reign of Marwān II (744–50). It is an inscription on three fragments belonging to the same *ṭirāz* in silk currently in the Victoria and Albert Museum in London, the Whitworth Art Gallery in Manchester, and the Brooklyn Museum in New York City,[57] mentioning the existence of an official textile workshop[58] in Ifrīqiya. Apart from this, the textual sources only indicate, for the Umayyad reign, the presence of a palatial industry in al-Kūfa, patronized by Caliph Sulaymān b. ʿAbd al-Malik in 717–20 and specializing in the weaving of *wašī* or figured silk textile.[59]

By contrast, there is abundant historical and material evidence that imperial textile workshops existed from the early ʿAbbāsid caliphate in Baghdad, Sāmarrā, and Tiberias. The manufactory of Baghdad produced *siqlāṭūn* and *yakānakī* that were embroidered silk taffetas inscribed with the name of al-Manṣūr (754–75). Fragments of them are now kept in the Pfister Collection in the Vatican Library. Several pieces of evidence lead us to suppose that the workshop of Baghdad, most likely located in the caliph's palace, was moved to Sāmarrā when the ʿAbbāsid family fled the capital in 833. Some *ṭirā*zes dated to the mid ninth century and kept in the Pfister Collection show decoration patterns remarkably identical to the motifs of the mural paintings of the harem in the Ǧawsaq palace, built in Sāmarrā by Caliph al-Muʿtaṣim in

[57] DAY, F. E. (1952) 'The ṭirāz Silk of Marwān', in G. C. Miles (ed.) *Archaeologica Orientalia in Memoriam Ernst Herzfled* (New York: J. J. Augustin) 39–61; GUEST, R., KENDRICK, A. F. (1932) 'The Earliest Dated Islamic Textiles', *Burlington Magazine* 60: 185–91.

[58] I. '[The Servant of] God, Marwān, Commander of the Faith-' II. 'ful. Of what was ordered [. . . to be made by] al-R . . . ' III. 'In the ṭirāz of Ifrīqiyah.'

[59] AL-MASʿŪDĪ (1989) *Murūǧ al-ḏahab, Les prairies d'or* 5, trans. Ch. Barbier de Meynard, A. Pavet de Courteille (Paris: Société Asiatique) 400, 466; AL-QALQAŠANDĪ (1913–19) *Ṣubḥ al-aʿšā* 4 (Cairo) 7; AL-ǦĀḤIẒ (1932) 'Al-Tabaṣṣur bi al-tiǧāra', *Revue de l'académie arabe de Damas* 12: 334; SERJEANT, R. (1972) *Islamic Textiles: Material for a History up to the Mongol Invasion*s (Beirut: Librairie du Liban) 14.

833.[60] Additionally, the tenth-century chronicler al-Masʿūdī relates that in the al-Balkuwārā palace of Sāmarrā built by al-Mutawakkil (847–61), an entire wing was devoted to the wardrobe of the ruler and the official *ṭirāz* workshop.

In ninth-century Syria, epigraphic evidence also attests to the existence of an imperial manufactory at Tiberias, which would have been dedicated to the production of linen and rush mats used to pray, known as *siǧǧāda*. A well-preserved mat (233cm; 115cm), kept in the Benaki Museum in Athens, and dating from the caliphate of al-Mu'tadid (892–902), shows two decorated and epigraphic bands mentioning its fabrication in the *dār al-ṭirāz al-ẖāṣṣa* of Tiberias.[61] The name of this supposedly imperial manufactory appears on another fragment of a rush mat dated to the end of the ninth century, kept in the Pfister Collection,[62] as well as on a contemporary hemp mat from the National Museum of Kuwait.[63] This official textile factory of Tiberias would have remained in use up to the tenth century, as reports the geographer al-Muqaddasī.

The situation in the urban environment was different in terms of the spatial dimension and nature of production. Geographically, the zoning of textile production, present such as at Timgad, was certainly perpetuated, as seen in Jarash. The excavation of the second-century hippodrome of Jarash between the Arch of Hadrian and the Temple of Zeus have led to the uncovering of clues supporting this idea.[64] After the monument lost its public function,[65] dyers and weavers settled, in the early eighth century, in at least twenty of the warehouses located under the northern stands of its hemicycle (rooms E1 to E7 and W2 to W18). Each room, rectangular (L 9.00m, W 3.50m) or trapezoidal (9.20m and 10.10m from east to west, 4.15m and 3.10m from north to south) in form, was divided, following the same model, into two areas demarcated by their floors (figs. 4.18/a, b, c, 4.19, and 4.20, and Appendix 11–24). Just after the entrance can be found a paved area, dedicated to textile cleaning, including vats and jars to store water, as well as rectangular basins with ducts for disposing of waste water. The fabrics or textile fibres were soaked in order to remove all sandstone, greasy substances, and waterproof pectins.

[60] CORNU, G., VALANSOT, O., MEYER, H. (1992) 36.

[61] DIMAND, M. S. (1942) 'Two Abbasid Straw Mats Made in Palestine', *The Metropolitan Museum of Art Bulletin* 1: 76–9; COMBE, E. (1939) 'Natte de Tibériade du Musée Bénaki', in *Mélanges syriens offerts à Monsieur René Dussaud* 2 (Paris) 841–4; (1933–6) *RCEA* 4 (Cairo) 1542.

[62] CORNU, G., VALANSOT, O., MEYER, H. (1992) 59.

[63] JENKINS, M. (1983) *The Al-Sabah Collection: Islamic Art in the Kuwait National Museum* (London: Sotheby) 43.

[64] BESSARD, F., BONNERIC, J., CALLOT, O. (2013) 'Jérash et l'essor de l'économie urbaine au début de l'Islam (Considérations à partir de l'exemple des ateliers de teinturiers byzantino-umayyades de l'hippodrome)', *SHAJ* 12: 305–18.

[65] See Chapter 3 regarding the late antique history of the hippodrome and its conversion into an artisanal facility in the early eighth century.

Beyond this area, a workspace, featuring a clay floor, extended to the rear, probably used to dye textile. It was surrounded by macerating vats for dyes and rectangular basins to dye fibres or fabrics. Artisans made use of the Roman building to build the artisanal facilities. Tasks were standardized and, although the artisans worked in a community, they continued to manufacture individually. However, it is most likely that there was a communal management of resources. Craftspeople were probably sharing water stored in the large cisterns found along the north-western wall of the hippodrome and the clay sediment extending to the south-west of the Roman cavea.

While the clustering of textile production in the urban environment was a standardization of a Roman practice, the model of production by specialized household-size units that was the norm in the Roman and late Roman world seemed to have declined in the medieval world. While it may have survived locally, literary documents from the ninth and tenth centuries show that it became supplanted by the emergence of large-scale public manufactories. Compared to the Roman model where textile production was either based on outwork or, in the case of Rome, Ostia, or Pompeii, on specialized workshops, each one dedicated to one aspect of the production—such as the large fulleries of Ostia—the medieval manufactory engaged, as late antique *gynecea*, in many if not all the production of material. They are textually attested in Egypt, the southern Levant, Baghdad, and Fārs in the ninth and tenth centuries. Although they have not left any material traces, woven markings illustrate their existence and define them as public *dār al-ʿāmma* as opposed to *dār al-ẖāṣṣa* owned by caliphs and producing solely for the court. Several fragments of linen textiles dating from the end of the ninth century bear, for instance, the makers' marks of a public factory in Tinnīs in Egypt,[66] which is described, with others, in detail in the late-twelfth-century chronicle of Michael the Syrian. These manufactories were built under the governorate of Ṭāhir in 825 and the reign of al-Ma'mūn (813–33). The chronicle illuminates the major role of private capital investment in the development of medieval textile industries as well as the strong hierarchy and labour conditions within these facilities. Men carded linen that the women spun and wove, the craftspeople working for a daily wage of half a silver coin. The firms were dominated by merchants who bought the equipment as well as raw materials and then sold the finished product. They supervised the labour and enriched themselves selling the textiles for their exclusive profit.[67]

An embroidered cotton fragment of *ṭirāz* dating from 868, at the Detroit Institute of Arts,[68] also refers to a public workshop in Baghdad. The piece of

[66] (1939) *RCEA* 10 (Cairo) 10589, 10613.

[67] CHABOT, J.-B. (1905) *Chronique de Michel le Syrien* 3 (Paris: Leroux) 76–80.

[68] KÜHNEL, E. (1952) *The Textile Museum. Catalogue of Dated Tiraz Fabrics. Umayyad, ʿAbbāsid, Fatimid* (Washington DC: National Publishing Company) 9.

textile was most likely produced in al-ʿAttābīya quarter in the western suburbs of Baghdad, which was famous for hosting large public textile manufactories from the caliphate of al-Ma'mūn (813–33) to the reign of Muʿtazz (866–9). Among the establishments, mentioned in textual sources, were cotton and silk taffeta artisanal facilities owned by merchants or wealthy entrepreneurs, who employed skilled workers, such as degreasers, carders, spinners, weavers, and tailors.

The role and functioning of private manufactories are described in detail in the tenth-century geography of al-Iṣṭaḫrī. Describing Fārs and the regions of Darabǧird, Ardašir-ḫurreh, and Arraǧān, he recounts the weaving of furniture fabrics and clothes in silk, linen, and wool, which constituted the chief source of wealth for local towns. Textiles were produced in imperial facilities or *ṭuruz al-sultān*, as well as private manufactories named *ṭuruz al-tuǧǧār*. Workshops based on private capital proliferated in the cities of Ǧahram,[69] Ǧannab,[70] and Fasa.[71] Their productions sustained local and imperial consumption. Al-Iṣṭaḫrī reports that ʿAbbāsid rulers ordered items from the public manufactories of Ǧahram, through the intermediary of an agent. This illustrates that there was no opposition between imperial and private production. It is even most likely that the regular importation of textile from Fārs to Baghdad for the ʿAbbāsid imperial elite indirectly favoured the growth of private industries. In the ninth and tenth centuries, the evolution of textile production thus rested on the influx of private capital.

3. FOOD PROCESSING INDUSTRIES

As for food processing industries, archaeological evidence reveals that there was no major revolution under the Umayyads and even a return to old technologies from the Roman period. The remains of presses and watermills illustrate a less labour-intensive production than in the second- and third-century Roman Near East.[72] Yet, our view may well be distorted by the nature of our sources. They all come from small towns, as Boṣra in the Ḥawrān, villages, and Umayyad aristocratic residences in the semi-arid regions of the Levant, and all date from the late seventh and early eighth centuries. Bernard Geyer and Marie-Odile Rousset's study of the North Syrian steppe from late

[69] IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: De Goeje) 268.
[70] IBN ḤAWQAL (1939) 269.
[71] IBN ḤAWQAL (1939) 299.
[72] For more on presses and watermills in the Roman world, see WILSON, A. I. (2008) 'Large-Scale Manufacturing, Standardization, and Trade', in J. P. Oleson (ed.) *Oxford Handbook of Engineering and Technology in the Classical World* (Oxford: Oxford University Press) 393–417, as well as (in the same Oxford Handbook) his 'Hydraulic Engineering and Water Supply', 285–318.

antiquity to the tenth century has argued that the occupation of the arid zones, which was extensive in the fifth and sixth centuries, began to decline under the Umayyads.[73] Surveys have shown that sites were being abandoned, and that the nature of occupation evolved from widespread small Byzantine villages to fewer local agricultural farms and residences. The technological changes observed in presses and watermills in the transition from late antiquity to the early eighth century could simply be the consequence of the evolving living patterns in the Levant arid zones and needs for a more localized production of oil, wine, and flour. The suggestions below must be taken with caution. It is likely that the changes observed did not reflect the global evolution of food processing industries in early Islam. It may be that food industries attached to major cities, such as the watermills of Mosul, experienced a completely different development in the eighth and ninth centuries.

3.1 Oil and wine industries

The production of oil and wine in the Roman and late Roman era was extensive; remains of Roman presses engaged in large-scale production have been unearthed in Africa, Istria, Spain, and the Levant in Zreiqāt, ʿAyn Dārā, Kimār, Taqlé, and Khirbet Šeikh Barakāt in the Limestone Massif of North Syria.[74] These presses used the technology of lever and windlass. A long wooden beam was attached with a rope to a drum turned by means of handspikes. As the drum rotated, the beam was pulled down to squeeze a pile of baskets containing the grapes or the olives.[75] For batteries of presses, such as in Henchir Sidi Hamdan and Senam Semana in Tripolitania, this technology enabled the presses to be set running in rotation by a single press crew and a production of massive oil output for local consumption and market sale. In the Limestone Massif of Syria during the Roman era, the production of oil and wine was, for instance, consumed locally and sold in nearby Antioch.

In the early medieval world, the old winch system was abandoned for a screw-based technology, known in the Roman world, the remains of which were found at Kafr Nābo in North Syria and dated to the first to the fourth centuries, as well as at ʿAzzun and Rehovot in Palestine and dated to the sixth

[73] GEYER, B., ROUSSET, M.-O. (2011) 'Déterminants géoarchéologiques du peuplement rural dans les marges arides de Syrie du Nord aux VIIe-IXe siècles', in A. Borrut et al. (eds.) *Le Proche-Orient de Justinian aux Abbassides. Peuplement et dynamiques spatiales* (Brussels: Brepols) 77–92.

[74] CALLOT, O. (1984) *Huileries antiques de Syrie du nord* (Paris: P. Geuthner) 40–1.

[75] CALLOT, O. (1984) 31–42. See also DECKER, M. (2007) 'Water into Wine: Trade and Technology in Late Antiquity', in L. Lavan, E. Zanini, A. Sarantis (eds.) *Technology in Transition A.D. 300–650* (Leiden: Brill) 65–92.

to the seventh centuries.[76] The systematization of this mechanism in Palestine, along with Judea and Samaria, as well as in North Syria and the Palmyrene, led to the refurbishment of ancient presses, as well as the dismantling of others to build new presses from scratch. In this new wooden mechanism, a large nut joined the lever to a screw that was anchored to the floor by a pierced stone. One or two pieces of wood were inserted into the screw perpendicularly. These rods were pushed by either one or two artisans to turn the screw, which lowered the lever to press the baskets. While screw presses were more labour-intensive than the lever-and-windlass presses, they could exert a greater pressure per unit area and thus extract a bit more juice per pressing.[77] This return to an old Roman technology may have been favoured by the needs of a more localized and individual form of production.

This is certainly what happened in northern Syria. The excavations at Dehes and Sergilla have revealed several examples of Roman presses altered to use the screw system. Archaeological evidence suggests that the batteries of small presses were abandoned and single screw presses developed attached to luxurious residences that epigraphic and architectural insights date to the end of the seventh or early eighth century. For instance, at Sergilla, in the Ǧabāl Rīḥa, the refurbishment of House IX during the Umayyads, as suggested by a religious inscription in Arabic and Syriac above the principal entrance of the building, included the foundation of a press equipped with the screw system. This system was built to replace an older fifth- to sixth-century press, whose remains were excavated in one of the ground-floor rooms of the house (figs. 4.21, 4.22, and 4.23). When the building was refurbished in the late seventh or early eighth century, the initial oil and wine press was demolished and the elements of its architecture reused to build the press next to the household.

In Dehes, the new screw presses were generally built to replace batteries of winch presses, as for press 18 excavated at the east of the church on the west side of the village (figs. 4.24, 4.25, and 4.26). The old presses were dismantled, most likely in the eighth century. Press 18 was fitted into a rectangular pit (9.50m east–west; 6.50m north–south) dug in the rocky substratum. On its western side, it included a rectangular basin (4.45m east–west; 4.30m north–south; 0.65m deep), whose floor was not flat but sloped down to a small vat, where the oil was collected. Its western wall also comprised the niche, in which the lever of the press fitted, built in reused blocks from the previous presses. On the eastern side of the press stood the collecting vat, in the form of a truncated cistern (1.90m deep; 1.15m diam.), and the anchor stone of the screw mechanism. The screw was connected to a wooden lever and a stone

[76] ROLL, I., AYALON, E. (1981) 'Two Large Wine Presses in the Red Soil Regions of Israel', *PEQ* 113: 111–25.

[77] CALLOT, O. (1984) 42–54.

that were pushed down to crush the grapes and olives. The old collecting vats were dismantled or filled in with rubble. The replacement of batteries of lever-and-windlass presses by one screw press certainly meant, then, a considerable drop in production compared to the second century (see also press 10, Appendix 8). From the eighth century, the local villages may have been more orientated towards a subsistence economy, combining polyculture with the production of oil and wine at an individual level. In southern Syria, comparable examples confirm that the return to screw presses fitted the new economic needs for a more individual and localized production, and remains have been found in the aristocratic residences at Umm al-Summāq in the south of ʻAmmān and Wādī al-Qanāṭir (Appendix 34–5) in the region of Madaba.[78]

3.2 Watermills

In the same way, the Umayyads went back to early Roman technology—the horizontal mills—which had inferior milling capacities but could be more easily built and make better use of small watercourses; this was useful in the Near East in the context of the colonization of the steppe when the Roman–Sasanian border ceased to operate. In the Roman world, the mills used water to activate a sophisticated mechanism of vertical wheels that determined the movement of grindstones. Remains of this type of mill, dated to the Roman and Byzantine eras, have been uncovered in Palestine/Israel,[79] Asia Minor, and Western Europe.[80] Yet, in the early medieval Near East, the vertical wheels of these watermills[81] were replaced by horizontal wheels. Horizontal mills were

[78] BUJARD, J., GENEQUAND, D. (2001) 'Umm al-Walid et Khan az-Zabib, deux établissements omeyyades en limite du désert jordanien', in B. Geyer (ed.) *Conquête de la steppe* (Lyon: Maison de l'Orient et de la Méditerranée) 189–210.

[79] AVITSUR, S. (1960) 'On the History of Exploitation of Water-power in Eretz Israel', *IEJ* 10: 37–45; (1969) 'Water-mills in Eretz Israel and their Contribution to Water-power Technology', in *Transactions of the Second International Symposium in Molinology* (Danemark: The International Molinological Society) 389–407; WIKANDER, Ö. (1985) 'Archaeological Evidence for Early Water-mills. An Interim Report', *History of Technology* 10: 151–79; OLESON, J.-P. (1983) 'A Roman Water-mill on the Crocodilion River near Caesarea', *Zeitschrift des deutschen Palästina-vereins* 100: 137–52.

[80] BRUN, J.-P., BORREANI, M. (1998) 'Deux moulins hydrauliques du Haut-Empire romain en Narbonnaise. Villae des Mesclans à la Crau et de Saint-Pierre, Les Laurons aux Arcs', *Gallia* 55: 308.

[81] Remains of Roman and late Roman water sawmills with vertical wheels have been discovered in Asia Minor at Hierapolis and Ephesos, as well as in Jordan in Jarash. SEIGNE, J. (2002a) 'A Sixth-Century Water-Powered sawmill at Jarash', *ADAJ* 46: 205–13; (2008) 'Restitution et reconstitution d'une scierie hydraulique du VIe siècle de notre ère à Gerasa/Jerash (Jordanie)', in *Virtual Retrospect 2007. Actes du Colloque Pessac 2007* coll. Archéovision 3 (Bordeaux: Ausonius Editions) 261–8.

by no means new in the Umayyad period—like vertical mills, they had been used since the third century BCE.[82] While they have inferior milling capacities to vertical-wheeled mills, in the sense that their output is considerably less, they were easier to build because the wheels connected directly to the grindstones without a complex mechanism, and they could sometimes make better use of small watercourses, delivering a low flow, which is useful in semi-arid environments in the Near East.[83]

Remains of medieval mills in the semi-arid regions have been unearthed in the Ḥawrān at Boṣra,[84] in the Palmyrene at Qaṣr al-Ḥayr al-Ġarbī[85] and Qaṣr al-Šarqī (Appendix 27–8),[86] as well as at Ma'ān,[87] along *wādī*s offering a continued supply of water. The mills of Qaṣr al-Ḥayr al-Ġarbī, al-Šarqī, and Ma'ān were attached to Umayyad aristocratic domains, whereas the one of Boṣra, established on the late-fifth- to sixth-century principal aqueduct[88] supplying the city, was undoubtedly connected to the urban centre (figs. 4.27, 4.28, and 4.29).[89]

Boṣra's mill was connected upstream with an aqueduct and used moving water as its power source. The water entered the mill via two vertical canals and poured into the wheels through narrow openings. The wheels were connected to the grinding mechanism in the upper level of the mill that has completely disappeared. Yet, archaeologists have suggested that the upper floor room, which was balanced on transversal basalt beams, had its walls and floor covered with a thick lime mortar surface on which to produce and store the flour. The construction of the mill coincided with the establishment of an Arab-Muslim elite in the city. After a peaceful conquest in 634, which, according to literary evidence, did not involve any destruction of land

[82] See LEWIS, M. J. T. (1997) *Millstone and Hammer: The Origins of Water Power* (Hull: Hull Academic Press).

[83] See the discussion on horizontal water wheel in WILSON, A. I. (1995) 'Water-power in North Africa and the development of the horizontal water-wheel', *JRA* 8: 499–510.

[84] BLANC, P.-M., GENEQUAND, D. (2007) 'Le développement du moulin hydraulique à roue horizontale à l'époque omeyyade : à propos d'un moulin sur l'aqueduc de Bosra (Syrie du sud)', *Syria* 84: 295–306.

[85] SCHLUMBERGER, D. (1986) *Qasr el-Heir el-Garbi* (Paris: P. Geuthner) 4.

[86] GENEQUAND, D. (2009) 'Économie de production, affirmation du pouvoir et dolce vita: aspects de la politique de l'eau sous les omeyyades au Bilad al-Sham', in M. Al-Dbiyat, M. Mouton (eds.) *Stratégies d'acquisition de l'eau et société au Moyen-Orient depuis l'Antiquité* (Beirut: Ifpo) 160–1.

[87] GENEQUAND, D. (2003) 'Ma'ān, an Early Islamic Settlement in Southern Jordan: Preliminary Report on a Survey in 2002', *ADAJ* 47: 27–8.

[88] BLANC, P.-M., GENEQUAND, D. (2007) 297–8; DENTZER, J.-M., LEBLANC, J., CHEVALIER, A. (2009) 'Techniques et systèmes d'acquisition de l'eau à Bosra : initiatives de groupes et pouvoirs politiques', in M. Al-Dbiyat, M. Mouton (eds.) *Stratégies d'acquisition de l'eau et société au Moyen-Orient depuis l'Antiquité* (Beirut: Ifpo) 118–23.

[89] The tenth-century historian al-Azdī reports that urban watermills were also built in Mosul during the reign of Caliph Hishām in the early eighth century. Al-Azdī, *Ta'rīḫ al-Mawṣil* (Cairo: Mağlis al-a'lā li-l-šu'ūn al-islāmiyyah, 1967) 18, 24, 26, 32, 43.

and churches,[90] a Muslim community settled in Boṣra and this materialized by the emergence of a mosque and new houses, where Umayyad ceramic and coins were uncovered.[91] The discovery of around twenty funeral steles written in Arabic and dated to the Umayyad dynasty confirmed that a community of Muslims occupied the city from the late seventh century and the building of the mill probably occurred to fulfil the need of this local elite.[92]

While the literary testimonies remain scarce on the daily life of craftspeople, archaeological evidence gives us insight into the evolution of workspaces between 700 and 950. They reveal that manufacturing processes developed in the continuity of Roman and Sasanian practices. After the rise of Islam, there was nothing radically innovative but a case of replicating norms that were already in existence. The true rupture occurred later in the ninth century, when large glass, textile, and ceramic manufactories developed in Near Eastern cities to the detriment of household-size units. Their functioning rested on a division of labour already sporadically visible in the Roman world, such as in the large *fullonicae* of Pompeii, but at a greater scale, representing a growth compared to late antiquity and the Umayyad period. This evolution in production, far from being limited by Islam,[93] existed within the framework of the emergence of a mercantile capitalism under the ʿAbbāsids in the ninth and tenth centuries and prefigured the future developments of the European productive economy at the end of the Middle Ages.

[90] KORN, L. (2007) 'Période islamique, des Omeyyades aux Ottomans', in J. Dentzer-Feydy, M. Vallerin, Th. Fournet, R. Mukdad, A. Mukdad (eds.) *Boṣra, aux portes de l'Arabie* (Beirut: Ifpo) 76–7.

[91] SAUVAGET, J. (1941) 'Les Inscriptions arabes de la mosquée de Boṣra', *Syria* 22: 53–65.

[92] ORY, S. (2007) 'Les inscriptions', in J. Dentzer-Feydy, M. Vallerin, Th. Fournet, R. Mukdad, A. Mukdad (eds.) *Boṣra, aux portes de l'Arabie* (Beirut: Ifpo) 81.

[93] SHATZMILLER, M. (2011) 'Economic Performance and Economic Growth of the Early Islamic Period (650-1000)', *Sources and Approaches across Disciplines in the Near Eastern Studies—Proceedings of the 24th Congress of the UEAI, Leipzig, 2008* (Leuven: Peeters) 271–305.

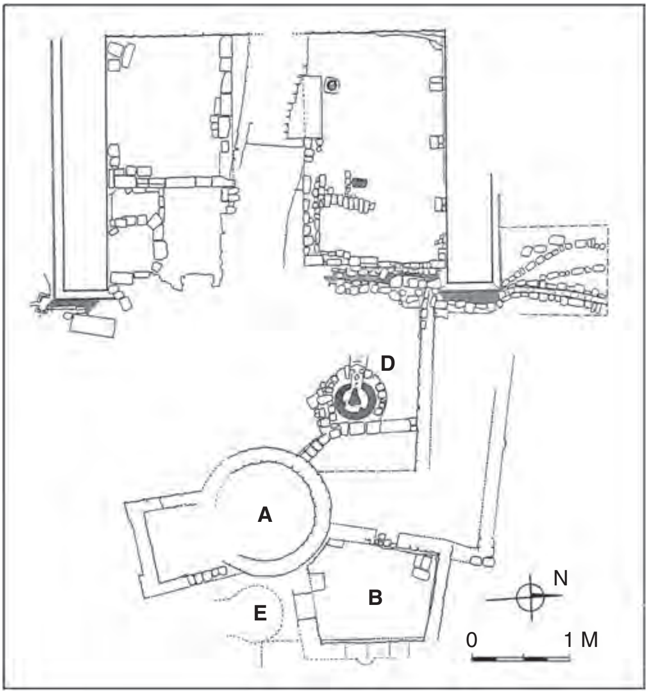


Fig. 4.1 Jarash, Temple of Artemis: plan of the kilns. (After Pierobon, R. 1981–3)



Fig. 4.2 Jarash, Temple of Artemis: kiln A. Heating room of the kiln after excavation. View of the central drop-shaped core. The imposing dimensions of the chamber (7m in diameter) are evident from the presence of an archaeologist photographed standing in the ruins. (© Archives of the DoA, ʿAmmān)

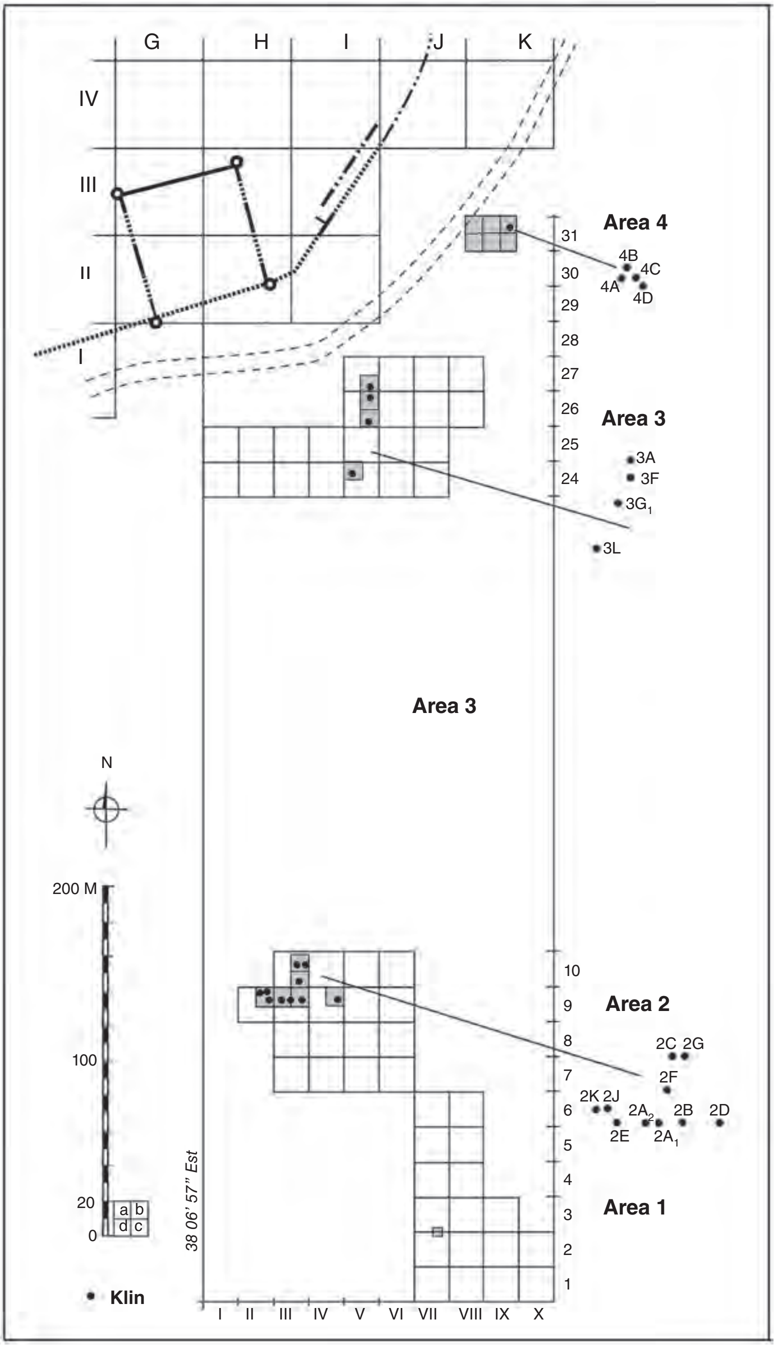


Fig. 4.3 Bālis: Map of the main excavations in the medieval artisanal suburb. The ten kilns unearthed in area 2 have been dated to the early ʿAbbāsid period. (Courtesy of J. Thiriot)

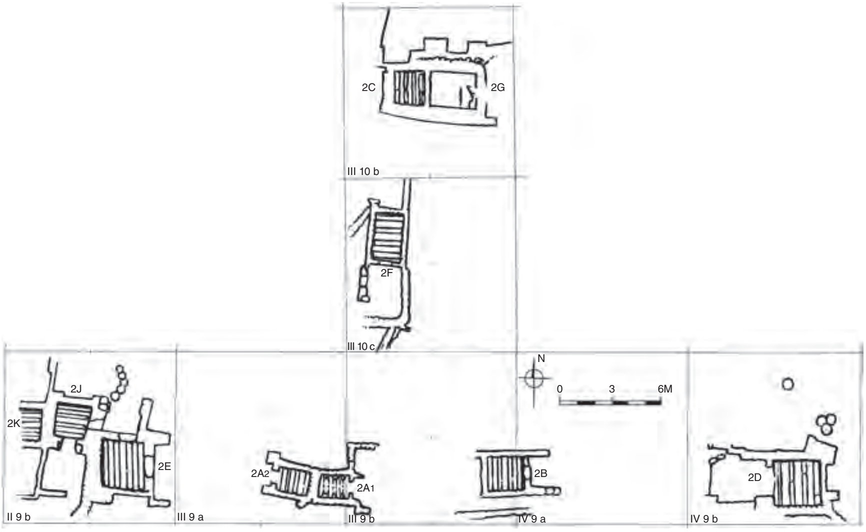


Fig. 4.4 Bālis: plan of the early ʿAbbāsid kilns. (Courtesy of J. Thiriot)



Fig. 4.5 Bālis: kiln 2e and its workspace including five jars, in a semicircle. (Courtesy of J. Thiriot)

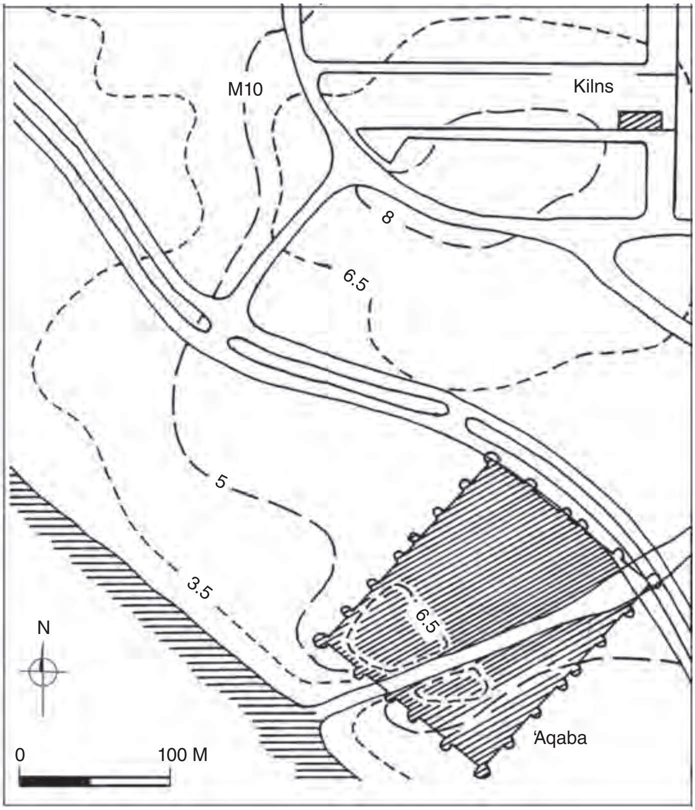


Fig. 4.6 ʿAqaba: map of the late-seventh-century port. (© D. Whitcomb)

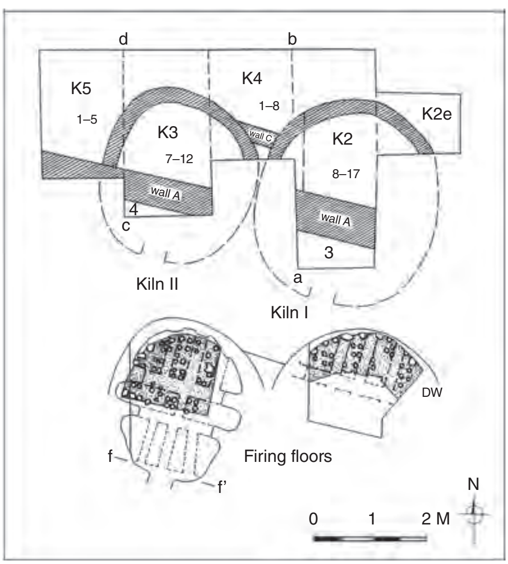


Fig. 4.7 ʿAqaba: Umayyad kilns. Plan of the kilns excavated in 1993 by D. Whitcomb. (© D. Whitcomb)

(a)

(b)



Fig. 4.8 a/b ʿAqaba: Detail of kilns I and II being excavated in 1993 and detail of the firing floor of Kiln II. (© D. Whitcomb)

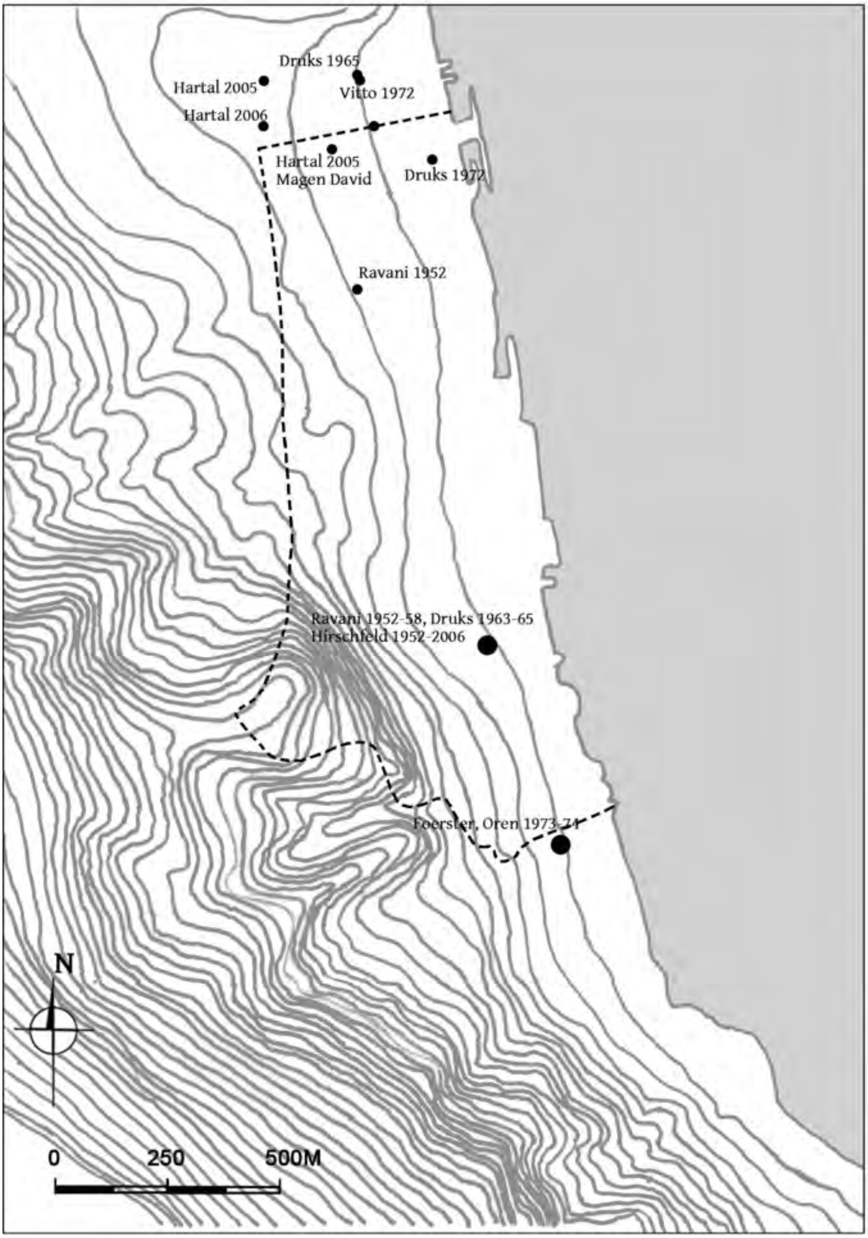


Fig. 4.9 Tiberias: map of the settlement and excavated areas. E. Oren's trenches in 1973–4 near the south gate led to the discovery of an early Islamic potters' workshop including production and glassmaking activities. (E. Oren 1971)



Fig. 4.10 Tiberias: view of the Umayyad potters' workshop. (Courtesy Israel Antiquities Authority)



Fig. 4.11 Bet Eli'ezer (Hadera): detail of the seventeen furnaces used for the production of primary glass, set up under the Umayyads. (Photo Jochai Rosen, Courtesy of the Israel Antiquities Authority)

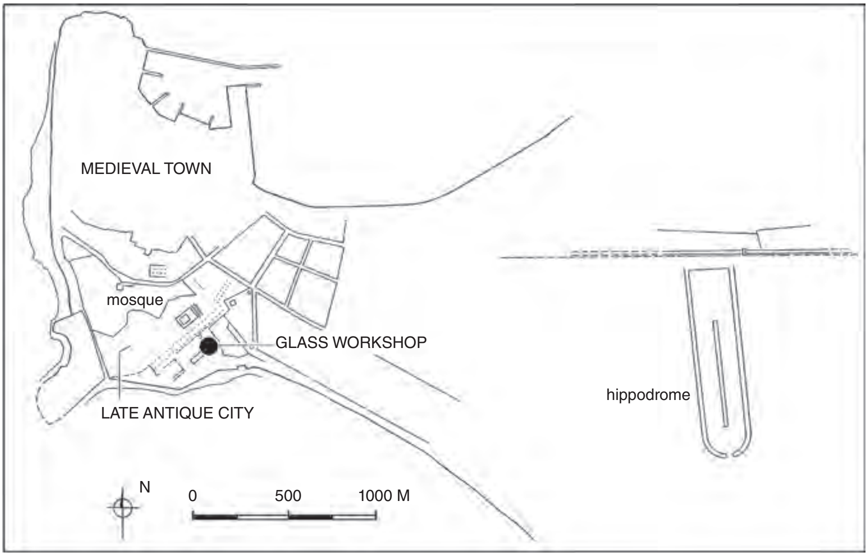


Fig. 4.12 Tyre: map of the port and its medieval glassmaking workshop. (F. Aldsworth et al. 2001)

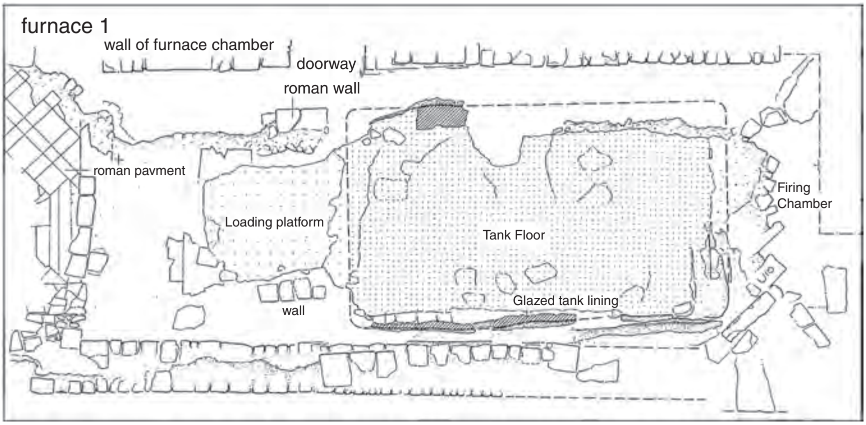


Fig. 4.13 Tyre: plan of furnace 1. (F. Aldsworth et al. 2001)



Fig. 4.14 Tyre: view of the tank furnace. The inside bears the remains of several layers of coating and of bits of raw glass illustrating the vitrification process. (F. Aldsworth et al. 2001)

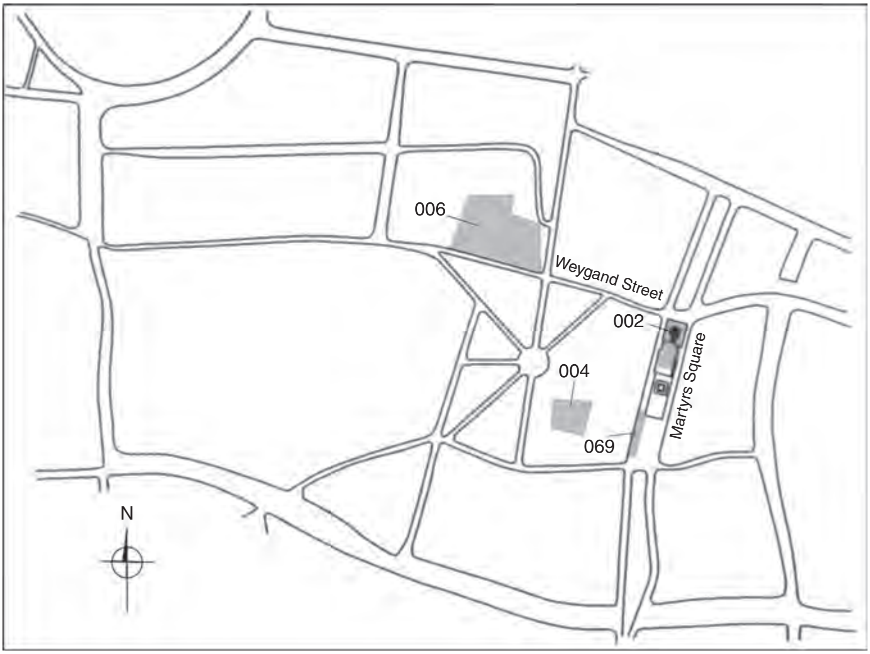


Fig. 4.15 Beirut: map of the settlement and the main excavation areas. (Aubert, C. 1996)



Fig. 4.16 Beirut: glass shards from Bey sector 002. (Courtesy of D. Foy)

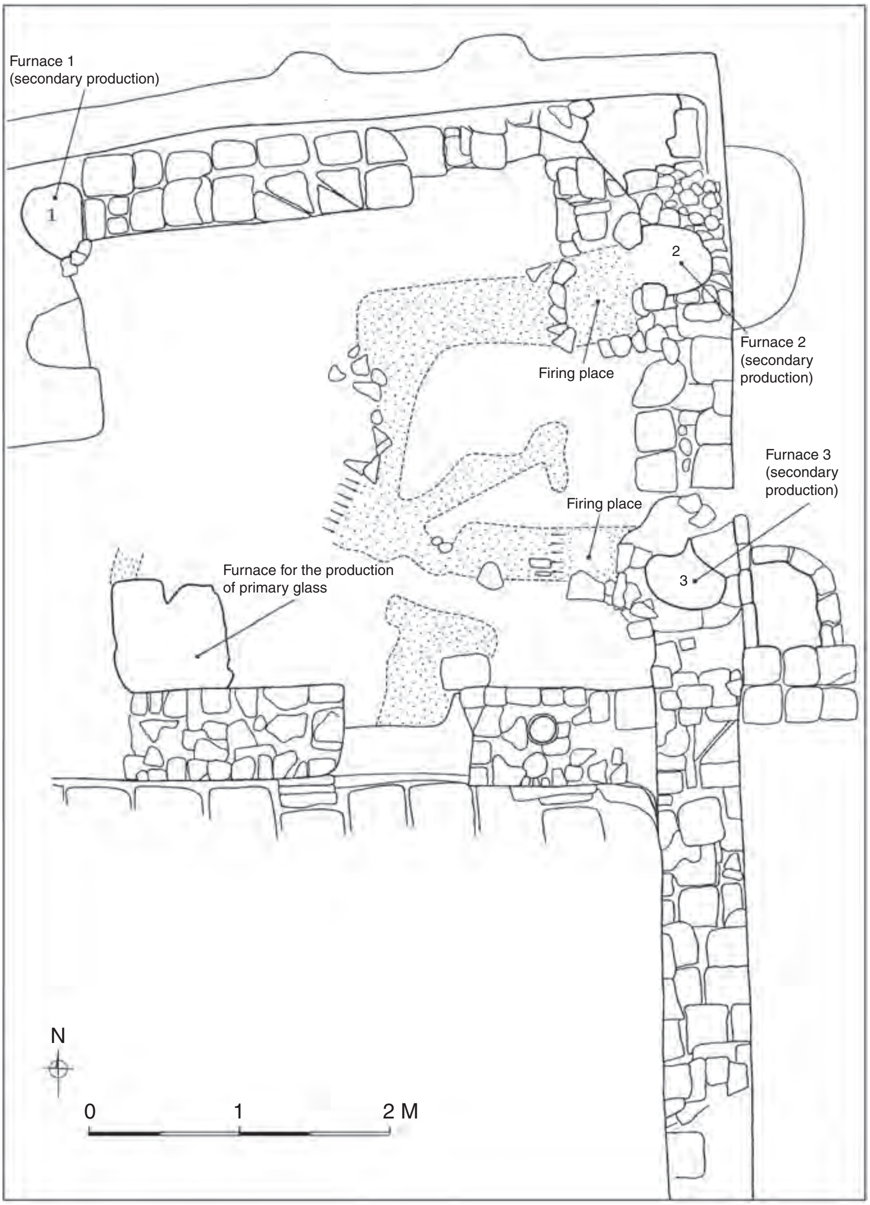


Fig. 4.17 Raqqa: plan of the glass workshops of Tell zuǧāǧ. (J. Henderson 1999)

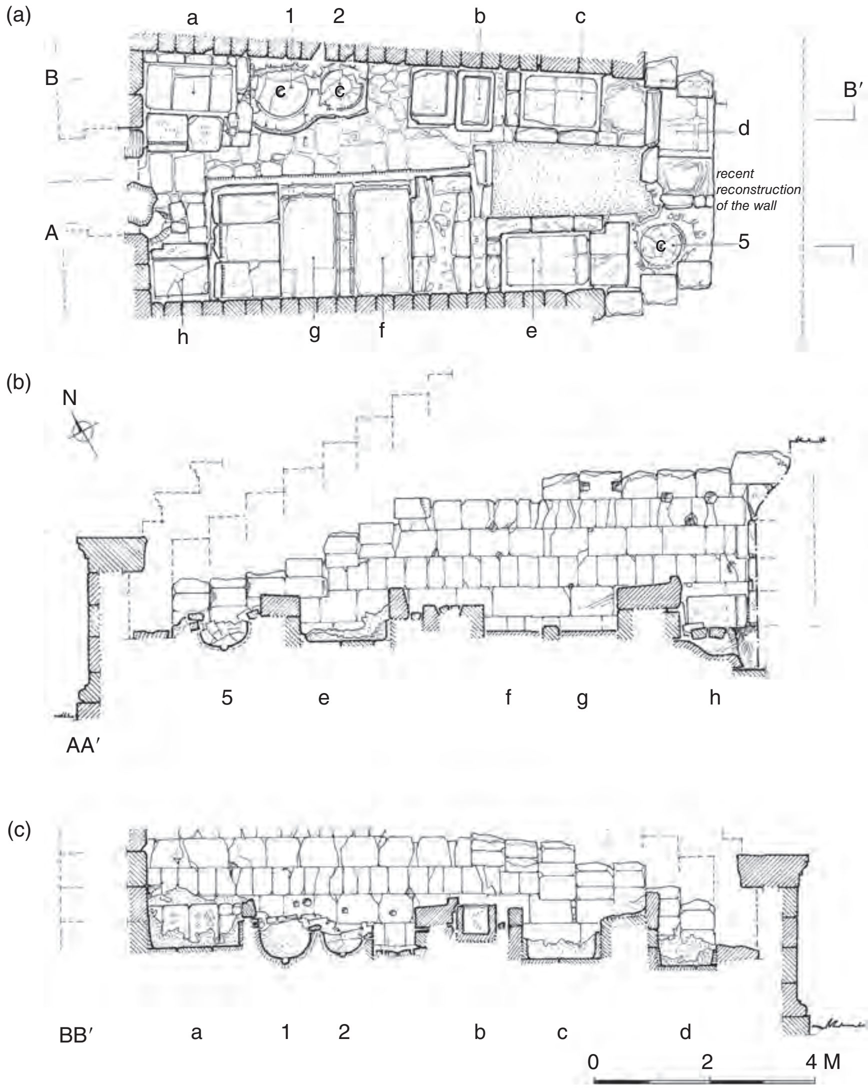


Fig. 4.18 Jarash, hippodrome: W9. (a) Plan of room W9 and its dyeing workshop. (b) AA' cross section of the Umayyad workshop. (c) BB' cross section. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)

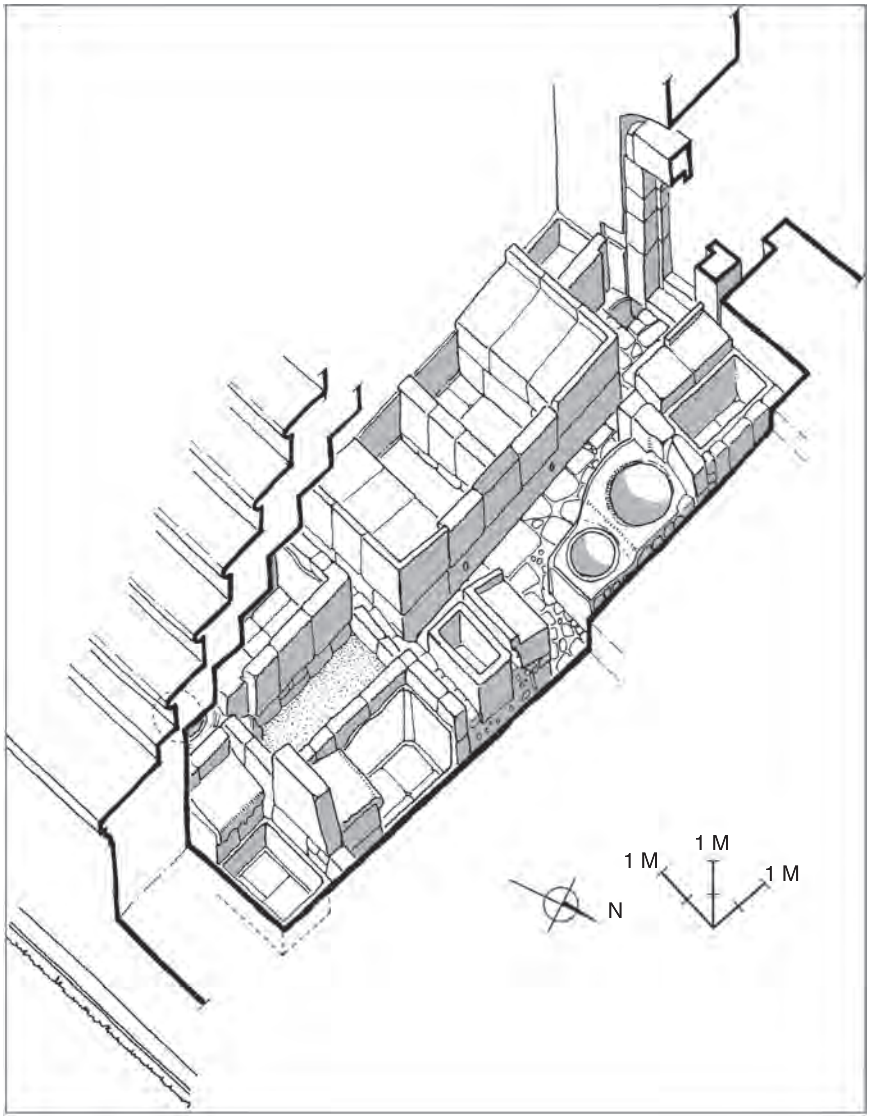


Fig. 4.19 Jarash, hippodrome: axonometric rendering of workshop W9. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)



Fig. 4.20 Jarash, hippodrome: view of workshop W9. Two workspaces were identified thanks to the distinctive nature of their floors: clay and stone slabs. (© F. Bessard)

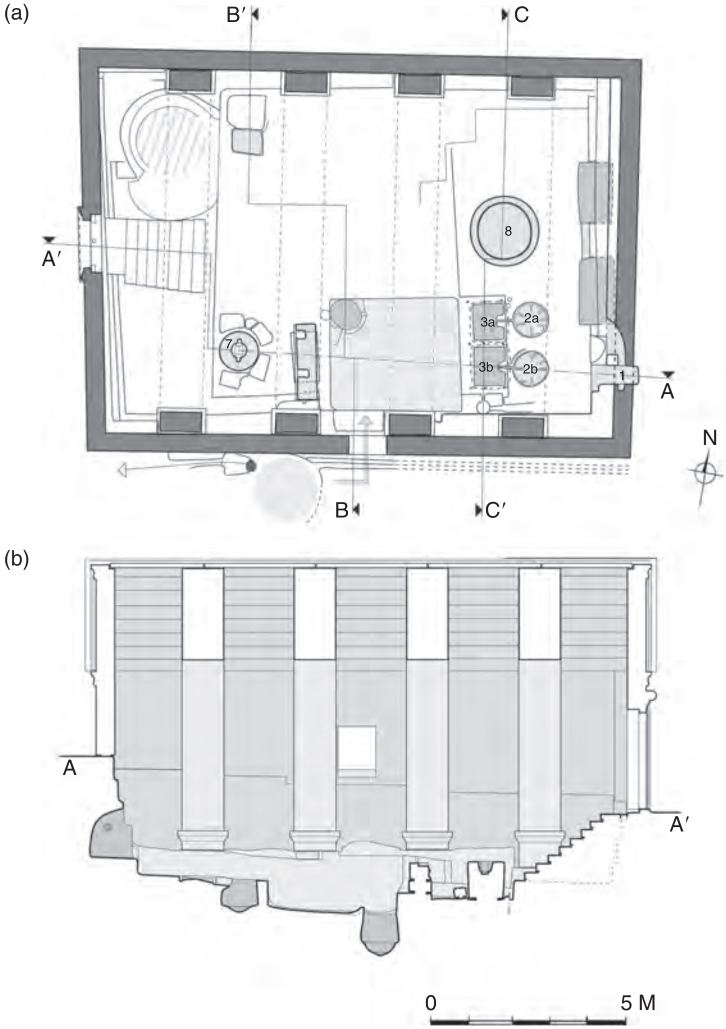


Fig. 4.21 Sergilla: (a) Plan of the Umayyad wine and oil workshop of House 9. The workshop had a screw press. The press featured a cylindrical anchor stone (7) which kept the foot of a screw in place. The screw was probably connected by a large wooden nut, to a lever, the end of which was lodged in a niche (1), carved out in the eastern wall of the press. When the screw turned, the lever came down and put pressure on two baskets placed inside circular casings (2a and 2b). These two baskets contained olive paste obtained by crushing the fruit using a millstone (8). The oil would then flow into the collection tanks (3a–b). (b) AA' cross section of the press. (© G. Charpentier)

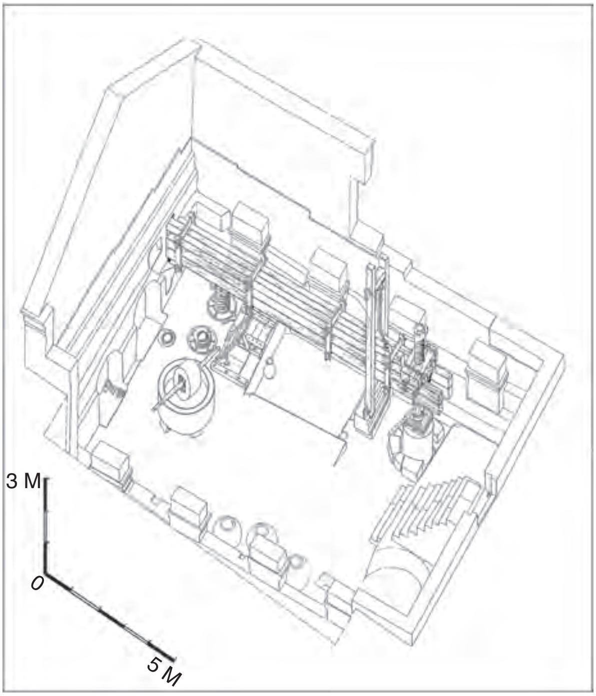


Fig. 4.22 Sergilla: suggested axonometric rendering of the Umayyad oil and wine workshop of house 9. (© O. Callot)



Fig. 4.23 Sergilla: general views of the oil and wine manufactory. (© O. Callot)



Fig. 4.24 Dehes: general view of press 18. (Courtesy of O. Callot)

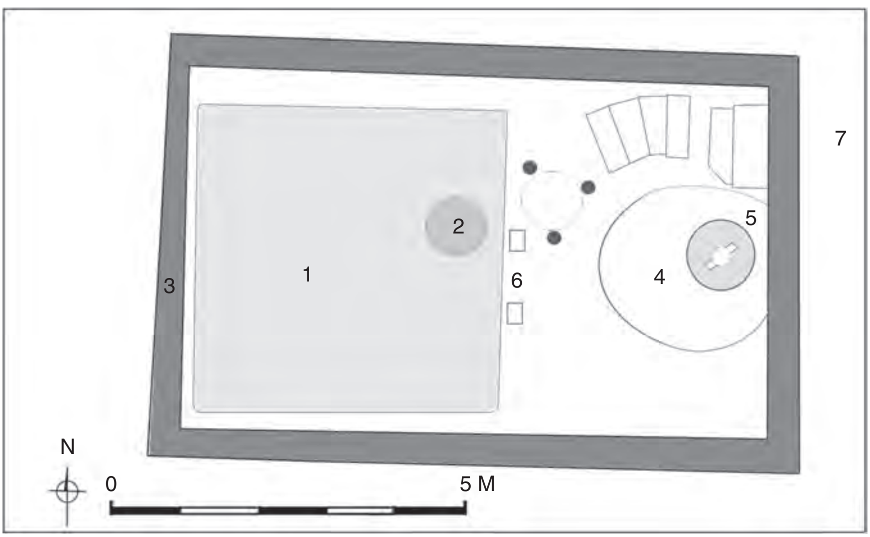


Fig. 4.25 Dehes: plan of press 18. This is a screw press which was built under the Umayyads upon the remains of three winch presses. It featured a rectangular pit (1) carved out of the rock, the bottom of which offered a steady slope leading to the press bed in the east (2). The press also had a recess (3) which hosted the lever. Lastly, on the east side was the pit (4) carved out from a block (5) for the anchor stone of the screw mechanism. Next to the pit, aligned with the niche, were two square sockets (6) meant to fit the base of the wooden uprights of a frame, necessary to maintain the lever. Lastly, in the north-east angle of the press, a stair of seven steps (7) provided an access to the installation. (Courtesy of O. Callot)

(a)



(b)



Fig. 4.26 a/b Dehes: details in press 18 of the screw mechanism and the niche for the press lever. (Courtesy of O. Callot)

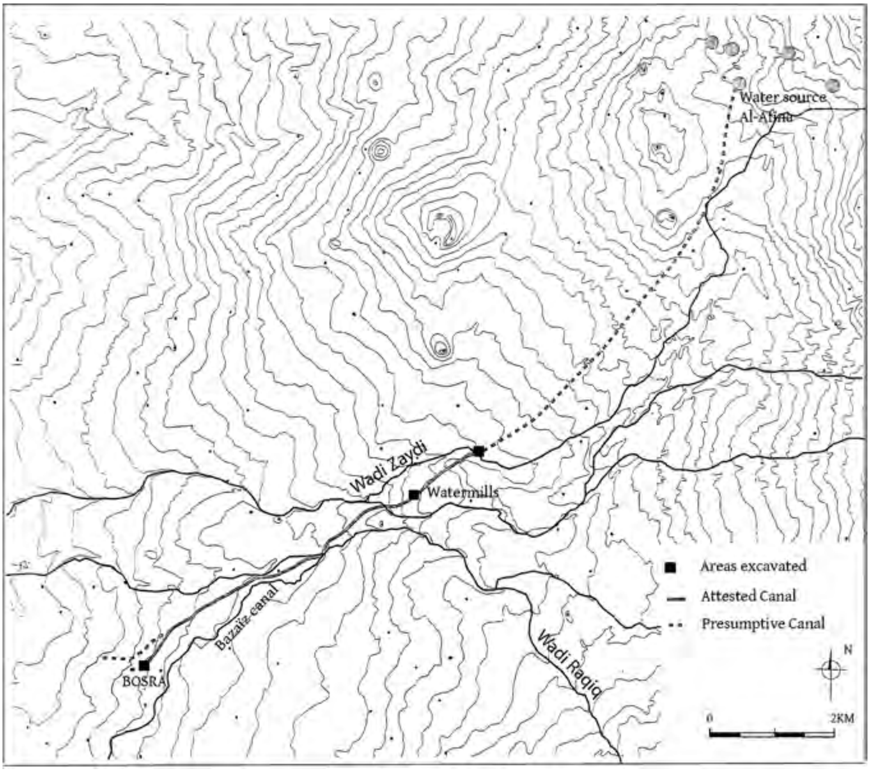


Fig. 4.27 Boṣra: map of the Umayyad watermill connected to the aqueduct of al-Afina. (Courtesy of D. Genequand, P. M. Blanc, Mission Archéologique Française en Syrie du Sud)

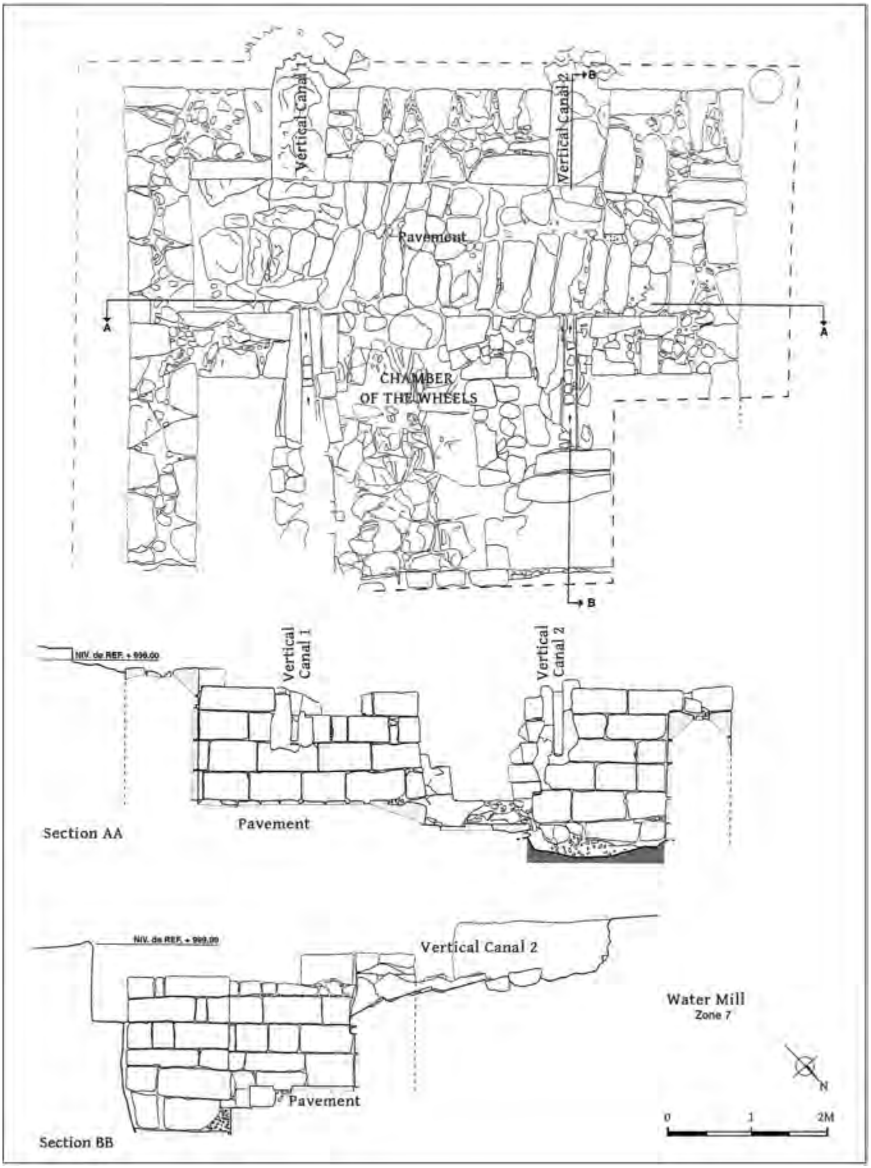


Fig. 4.28 Boṣra: plan of the watermill. (Courtesy of D. Genequand, P. M. Blanc, Mission Archéologique Française en Syrie du Sud)



Fig. 4.29 Boṣra: Umayyad watermill. (Courtesy of D. Genequand, P. M. Blanc, Mission Archéologique Française en Syrie du Sud)

5

Reshaping Marketplaces

Trade in pre-Islamic Arabia remained inseparably related to religious rites and took place predominantly during annual fairs in the Ḥiǧāz.[1] As for daily exchanges, literary and material sources suggest that they were conducted spontaneously in the courtyard of households or in unbuilt esplanades. In Medina, Michael Lecker argues that the marketplaces of Zubāla, Banū Qaynuqā', Ṣafāṣif, and al-Muzāḥim, later mentioned in al-Samhūdī's *History of Medina*, produced in the second half of the fifteenth century, were in fact open spaces, with no dedicated construction.[2] Jérémie Schiettecatte's excavations and surveys[3] in modern Yemen have confirmed that marketplaces were a practically non-existent feature in southern Arabia in antiquity up to 632, with the exception of shops discovered near Bi'r ʿAlī, in the site of the port of Qāni along the Gulf of Aden.[4] It is supposed that trade took place either in unbuilt areas, that constituted gathering spots for caravans, or in private dwellings, whose architecture did not incorporate a commercial function. Several esplanades, which may have been used for commerce, have been identified in the pre-Islamic urban settlements of Ma'rib, Hadaqān, Hinū al-Zurayr, Tamna', Shabwa, and Makaynūn in Yemen. Schiettecatte connects this almost complete absence of built and regulated marketplaces in Arabia, before the rise of Islam, with the paucity of inscriptions to traders,

[1] HAMIDULLAH, M. (1957) '*Al-Ilaf* ou les rapports économico-diplomatiques de La Mecque pré-islamique', in *Mélanges Massignon* 2 (Damascus) 293–311; SIMON, R. (1970) '*Hums* et *'ilaf* ou commerce sans guerre', *Acta Hungaricae* 23: 204–32.

[2] LECKER, M. (1986) 'On the markets of Medina (Yathrib) in pre-Islamic and early Islamic times', *JSAI* 8: 133–47; KISTER, M. J. (1965) 'The Market of the Prophet', *JESHO* 8: 272–6.

[3] SCHIETTECATTE, J. (2006) *Villes et urbanisation de l'Arabie du Sud à l'époque préislamique: formation, fonctions et territorialités urbaines dans la dynamique de peuplement régionale*, PhD History, Université Panthéon-Sorbonne, Paris I: 436–8.

[4] DAVIDDE, B., PETRIAGGI, R. (1998) 'Archaeological Surveys in the Harbour of Ancient Kanè', *PSAS* 28: 39–44; MOUTON, M., SANLAVILLE, P., SUIRE, J. (2006) 'Le port sudarabique de Qâni': paléogéographie et organisation urbaine', *CRAIBL* 150(2): 777–808.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard, Oxford University Press (2020).
DOI: 10.1093/oso/9780198855828.001.0001

who probably did not form a specific and controlled urban class.[5] Epigraphic sources, such as the inscription of Sirwāh-Khawlān reporting a sale of oxens, donkeys, and camels,[6] and one from al-Sawdā' on a leaf palm about an exchange of musk and sesame,[7] indicate private contracts confirming the spontaneous and unregulated nature of trade in pre-Islamic Arabia.

This picture strongly contrasts with what was occurring at the same time in the late Roman Levant and Sasanian Persia. Luke Lavan describes late antiquity as 'the peak period for commercial amenities [either colonnaded shops or covered market-places] in the classical city in the East'.[8] In the context of the Christianization of society, urban notables patronized the foundation of marketplaces on the remains of disused pagan temples (such as in Antioch[9] in Syria or Madauros[10] in Algeria) and superfluous political buildings. Compared to pre-Islamic Arabian practices, late antique marketplaces in the Levant and Persia formed an essential urban feature, subjected to a sophisticated fiscal system and an intrusive imperial authority.[11] Archaeological sources from the Levant and North Africa, and the ninth-century *Dēnkard*[12] which offers information on Sasanian economy, confirm that late Roman and Persian trade in the Near East was carefully organized and controlled. Urban marketplaces were spaces for both regulated retail and production, as well as being important areas for socializing. A division by *collegia* or guilds was widely adopted in the Persian bazaars[13] as well as in the Roman covered marketplaces and stalls set within public squares and streets,[14] such as at Sardis, Antioch, and Constantinople. In a recent publication, Jairus Banaji describes the Roman economy as 'relatively modern'

[5] Few examples of dedications have been found at Ma'rib and written on the obelisk of Hajar Kuḥlān (Tamna'). ARBACH, M., BĀTĀYI', A., AL-ZUBAYDĪ, K. (2013) 'Nuqûsh qatbâniyya jadîda', *Raydân* 8: 49–103.

[6] BRON, F. (1981) 'Inscriptions de Sirwâh', *Raydân* 4: 29–34.

[7] MÜLLER, W.W., 'ABDALLĀH, Y. (1994) *Textes du Yémen antique inscrits sur bois* (Louvain: Institut orientaliste de Louvain) pl. 15/A–B.

[8] LAVAN, L. (2012) 'From polis to emporion? Retail and Regulation in the Late Antique City,' in C. Morrisson (ed.) *Trade and Markets in Byzantium* (Harvard: Dumbarton Oaks) 366.

[9] For instance, the Temple of Ares on the Forum of Valens in Antioch was converted into a *macellum* in 364–75. DOWNEY, G. (1961) *A History of Antioch in Syria from Seleucus to the Arab Conquest* (Princeton: Princeton University Press) 632–67.

[10] In Madauros, the Temple of Fortune was transformed into a marketplace in 379–83, according to epigraphic evidence. PFLAUM, H. G. et al. (1922 [2003]) *Inscriptions latines de l'Algérie* 1 (Paris) 2103.

[11] LAVAN, L. (2012) 366.

[12] DARYAEE, T. (2010) 'Bazaars, Merchants, and Trade in Late Antique Iran', *Comparative Studies of South Asia, Africa and the Middle East* 30(3): 404.

[13] DARYAEE, T. (2013) *Sasanian Persia: The Rise and Fall of an Empire* (London: I. B. Tauris).

[14] LAVAN, L. (2006) 'Fora and Agorai in Mediterranean Cities: Fourth and Fifth Centuries AD', in W. Bowden, C. Machado, A. Gutteridge (eds.) *Social and Political Life in Late Antiquity* (Leiden: Brill) 195–249.

with guilds playing an essential role in the regulation and formation of trade monopolies in Asia Minor and the Levant.[15]

This chapter considers what happened to urban marketplaces in the Near East *after* the Muslim conquests, to look at the fate of the late antique legacy under the new Arab masters—a people with contrasting indigenous commercial traditions—in the context of new power dynamics from 700 to 950. Since the 1930s, a dozen early-eighth-century marketplaces have been found in the Levant, demonstrating that marketplaces continued to play a fundamental role as *spaces* making exchange practicable between individuals, who may or may not have shared religious and cultural values. As public meeting- and market-spaces, they remained key areas, under the control of political authority, fiscally and legally regulated by the imperial power. Yet, such discoveries have been studied almost exclusively for their art historical and architectural values, by Maxime Rodinson[16] in the preface of *El señor del zoco en España*, while their functioning and process of development have not yet been fully elucidated.[17] It is also believed that marketplaces in early Islam functioned as their late antique predecessors, with apparently nothing bequeathed from pre-Islamic Arabia, where dedicated spaces for trade were extremely rare. This chapter explores the ways in which early medieval marketplaces differed from the late antique past, and the role they played in the agrarian society of early Islam. It also examines what their specificities tell us about the evolution of labour patterns from 700 to 950, and the way sellers interacted with consumers.

1. FROM THE *ERGASTĒRION* TO THE *SŪQ*

In late antiquity, cities in the Near East and Anatolia had shops along the pavements of the main colonnaded streets or the fronts of great mansions. In their survey of late Roman marketplaces in the East and Central Mediterranean cities, Lavan and Toon Putzeys demonstrate that street-front shops

[15] BANAJI, J. (2015) *Exploring the Economy of Late Antiquity. Selected Essays* (Cambridge: Cambridge University Press) n. 72.

[16] CHALMETA, P. (1973) *El-Senor del Zoco en Espana: Edades media y wmoderna, contribucion al estudio de la historia del mercado* (Madrid: Instituto Hispano-Arabe de Cultura) 245–96. There is a revised edition of this text by P. Chalmeta (2010) *El zoco medieval. Contribución al estudio de la historia del mercado* (Almeria: Fundacion Ibn Tufayl De estadios Arabes).

[17] A. J. Naji and Y. N. Ali published in 1981 an article on the formation of *sūq*s in early Islamic Baṣra, which however used evidence coming all from literary sources of the ninth and tenth centuries, with an over-reliance throughout on al-Ṭabarī and al-Ǧāḥiẓ. See (1981) 'The Suqs of Basrah: Commercial Organization and Activity in a Medieval Islamic City', *JESHO* 24(3): 298–309.

(*tabernae* and *ergastēria*) could have very different purposes. Not all cellular shops served as retail spaces: some of them combined domestic and commercial use.[18] Others had a solely commercial function or involved an integration of retail with craft production. Lavan and Putzeys[19] argue that this was essentially secondary production and very rarely the primary processing of raw materials. In Asia Minor and the Near East, remains of metal,[20] oil,[21] pottery-working,[22] glass-blowing,[23] and clothmaking[24] have been uncovered in late antique shops. They had left distinctive architectural features (vats, kilns, crucible fragments, twin-screw press), broken tools, and waste products. A bakery including a small fireplace, known as a *tabun*, and oven installations was also discovered in fifth-century shops along Palladius Street in Baysān-Bet She'an.[25] These street-front stalls, incorporating both secondary production and retail, were generally single-storey constructions built on a square plan and included one or two rooms.

In 614–28, the Persian incursions in the Levant led to the destruction of public edifices and several late antique market areas in Antioch, Apamea, Baysān, and Jerusalem. However, most of the late antique *ergastēria* remained occupied without interruption from late antiquity to the early Islamic era.

[18] SEIGNE, J. (1981–1983) 'Recherches sur le sanctuaire de Zeus', *JAP* 1: 48–9; (1985a) 'Notes préliminaires sur l'évolution architecturale du sanctuaire de Zeus à Jarash', *Syria* 62 Fasc.1/2: 162–3.

[19] LAVAN, L. (2012) 347–51; LAVAN, L. (2006) 'Fora and Agorai in Mediterranean Cities: Fourth and Fifth Centuries AD,' in W. Bowden, C. Machado, A. Gutteridge (eds.) *Social and Political life in Late Antiquity* (Leiden: Brill) 195–249; PUTZEYS, T., LAVAN, L. (2007) 'Commercial Space in Late Antiquity,' in L. Lavan, E. Swift, T. Putzeys (eds.) *Objects in Context, Objects in Use: Material Spatiality in Late Antiquity* (Leiden: Brill) 81–109.

[20] KELLENS, N., DEGRYSE, P., MUCHEZ, P., NAUD, J., MAELKENS, M. (2003) 'Iron Production Activities and Products at Roman to Early Byzantine Sagalassos', in *Archaeometry in Europe, Proceedings 1, Milan, September 24–6* (Milan) 545–54.

[21] Evidence of metal, carpentry, and oil manufacturing has been unearthed in the third-century shops of the Temple of Zeus in Jarash. SEIGNE, J. (1986) 'Recherches sur le sanctuaire de Zeus à Jérash (Octobre 1982-Décembre 1983). Rapport préliminaire', *JAP* 2: 29–59.

[22] For instance, remains of a small-scale lamp production in Apamea have been found in shops along the south decumanus. BALTY, J. C. (1981) *Guide d'Apamée* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 104.

[23] Glass furnaces for blowing were discovered in the late antique street-front marketplaces of Aphrodisias and Ephesus in Asia Minor—SMITH, R. R. R., RATÉ, C. (1998) 'Archaeological Research at Aphrodisias in Caria', *AJA* 102: 225–50; CZURDA-RUTH, C. (2004) 'Glas aus Ephesos: Hanghaus 1 und eine Werkstätte des 6. Jahrhunderts n. Chr auf der Agora', in *Annales du 16e Congrès de l'Association Internationale pour l'Histoire du Verre, London 2003* (Nottingham) 158–61—as well as in Baysān in Palestine/Israel—KHAMIS, E. (2007) 'The Finds from the Shops of Scythopolis', in L. Lavan, E. Swift, T. Putzeys (eds.) *Objects in Contexts, Objects in Use* (Leiden: Brill) 453–4; GORIN-ROSEN, Y. (1998) 'Glass Workshop', in *The Bet She'an Excavation Project 1992–4*, *ESI* 17: 27–9.

[24] Clothmaking and dyeing activities left visible traces in Beirut's late Roman shops. BUTCHER, K., THORPE, R. (1997) 'A Note on Excavations in Central Beirut 1994-6', *JRA* 10: 291–306.

[25] KHAMIS, E. (2007) 446, 448.

Some of them were even expanded after the Muslim conquests. In addition, new rows of shops or *sūq*s along the street fronts were built in the Levantine cities. Architects followed the model of the late Roman facilities and these early Islamic marketplaces were provided with fixed stalls (*dakākīn* and *ḥawānīt* in Arabic) that could be locked up at night. Excavations of the Umayyad *sūq*s in Palmyra,[26] Baysān,[27] Ramla,[28] ʻAmmān,[29] Anjar,[30] Ruṣāfa,[31] and Arsūf (see Appendix 1–4, 30–1),[32] confirm that this model of street-front shops remained indeed popular and widely adopted in the new Islamic settlements and perpetuated in the late antique cities still occupied after the Muslim conquests. In the early medieval world, the *sūq* therefore physically developed following the model of its Roman and Sasanian predecessor.

In their social structure, the *sūqs* from the late Umayyad and early ʻAbbāsid dynasties differed from those of Medina at the time of the Prophet Muḥammad,[33] in that they were not organized by ethnicity or clan, but by profession, in line with the corporatist traditions of late Roman and Sasanian antiquity. This is evidenced in the ninth-century description of the Umayyad *sūqs* of Wāsiṭ in Iraq by the local chronicler Ibn Baḥšal. The markets of Wāsiṭ were built under the governorship of Yazīd b. Abī Muslim at the very end of the seventh century. Yazīd b. Abī Muslim designed them to function as a set of defined zones for the various commodities.[34] The streets took on the name of the trade plied there, such as fragrance shops (*ʻaṭṭārīn*) and grocers (*baqqālīn*). This model of 'sectorialization' was adopted in most of the early Islamic *sūqs* from Iran to North Africa. A contemporary description, by the eighth-century traditionalist Ṣafwān al-Saqsaqī, of the market al-Rastān in Ḥomṣ in Syria during the caliphate of Hishām b. ʻAbd al-Malik (724–43) confirms that a demarcation by trade

[26] AL-ASʻAD, Kh. (1989) 'The Umayyad Sūq in Palmyra', *DamMitt* 4: 205–23.

[27] KHAMIS, E. (2007) 464–8.

[28] BEN-DOV, M. (1984) 'Remains of an Omayyad and Mamluk Public Building at Ramleh', *Qadmoniot* 17: 82–5.

[29] NORTHEDGE, A. (1980) 'Survey of the Terrace Area at ʻAmmān Citadel', *Levant* 12: 135–55. On Umayyad ʻAmmān, see also the more recent research of Antonio Almagro and Ignacio Arce. ALMAGRO, A., ARCE, I. (2001) 'The Umayyad town planning of the citadel of ʻAmmān', *SHAJ* 4: 659–65.

[30] HILLENBRAND, R. (1999) 'Anjar and Early Islamic urbanism', in G. P. Brogiolo, B. Ward-Perkins (eds.) *The Idea and Ideal of the Town between Late Antiquity and the Early Middle Ages* (Leiden: Brill) 59–98.

[31] ULBERT, Th. (1992) 'Beobachtungen im Westhofbereich der Basilika von Resafa', *DamMitt* 6: 403.

[32] ROLL, I., AYALON, E. (1987) 'The Market Street at Apollonia-Arsuf', *BASOR* 267: 61–76.

[33] AL-SAMHŪDĪ (1984) [Cairo, 1955] *Wafā' al-wafā' bi-aḫbār dār al-muṣṭafā* 2 (Beirut: dār al-Kutub al-Ilmiyya) 747–8. A series of traditions indicate that the market of Medina was divided into areas of religious faiths at the time of the Prophet Muḥammad. Jewish and Muslim shopkeepers had their own commercial premises.

[34] IBN BAḤŠAL (1967) *Ta'rīḫ Wāsiṭ* (Baghdad: Gurguis ʻawwād) 43.

was favoured over that of clan or faith.[35] Similarly, in the middle of the ninth century, al-Yaʿqūbī mentions that the trading activities in Baghdad and Sāmarrā were carefully organized. Each trade benefited from a specific area, shops, and workshops, so that clear separations were maintained between the various professions.[36]

Material evidence confirms the continued profession-based organization of marketplaces in the transition from the Roman to early Islamic era. It is generally difficult to identify the nature of activities conducted by urban shops in all periods from the standing remains alone. However, the vestiges of tools and containers, and more recently the careful analysis of residues and traces of floor coating, have corroborated the textual evidence of a highly sophisticated division of labour in marketplaces already in existence in antiquity. In Roman Pompeii, a row of four perfume shops has been thus identified from the analysis of similar traces of vegetal oils.[37] Evidence of Roman inscriptions with toponyms[38] related to streets associated with specific trades has also been uncovered in Apamea,[39] Antioch,[40] and Thessalonika.[41] For the eighth to tenth centuries, the theory of a continued division of marketplaces by profession mostly relies on literary evidence because of the lack of detailed excavations of medieval shops, except perhaps those of the Umayyad *sūq* of Palmyra in 1984–6 (figs. 5.1 and 5.2). It was revealed that Palmyra's medieval marketplace comprised a couple of distinct series of shops, which were distinguished by the nature of their layout and flooring, either lime-plastered or stone-paved (Appendix 25–6). This difference in the treatment of walls and floors was probably not coincidental and could reflect the profession-based organization of the market in the early eighth century.[42]

Medieval *sūq*s bore a definite continuity of structure with late antique street-front marketplaces. However, despite obvious physical and organizational similarities, early Islamic *sūq*s acquired their own identity and functioned in a slightly different fashion from that of late antiquity. It seems that the combination of production and retail was less evident. It is most likely that

[35] MADELUNG, W. (1986) 141.

[36] AL-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 246.

[37] BRUN, J.-P. (2016) 'The Archaeology of Roman Urban Workshops: A French Approach?', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 84.

[38] RUFFING, K. (2016) 'Driving Forces for Specialization: Market, Location Factors, Productivity Improvements', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 121.

[39] CAGNAT, R. et al. (1906–27) *Inscriptiones Graecae ad res Romanas pertinentes* 4 (Paris: Leroux) n°790.

[40] (1923–71, 1979–) *Supplementum Epigraphicum Graecum* 35 (Amsterdam) n°1483.

[41] ROBERT, L. (1937) [re-ed. 1970] *Etudes anatoliennes: Recherches sur les inscriptions grecques de l'Asie Mineure* (Amsterdam) 535.

[42] AL-ASʿAD, Kh. (1989) 209.

a form of elementary production in the *sūq*s, inherited from late antiquity, probably persisted in some shops after the Muslim conquests. Nevertheless, what seemed to disappear in the late Umayyad archaeological levels is all the heavy equipment such as ovens, dyeing vats, oil presses, and crucibles. All activities involving the use of fire, chemical products, water, and the resulting polluting waste were no longer carried out on an individual scale or within the heart of the city. This invites some interesting questions. Does this indicate, for example, that there was an evolution in the urban regulation that operated in the beginning of the Middle Ages? Did the artisans, who were previously carrying on their craft in late antique markets, leave their individual shops for the manufacturing quarters that emerged on the immediate outskirts of the large cities from the eighth century?

Archaeological studies have confirmed that several late Roman street-front shops, that incorporated both production and retail, were abandoned in the early eighth century and replaced by solely commercial stalls in Baysān, Apamea, and Jarash. Between 1966 and 1978, the Belgian expedition of Jean-Charles Balty, in the south-east quarter of Apamea in Syria, known as the 'triclinos insula', uncovered an episcopal group (the east cathedral), a fourth-century palace (the official residence of a dignitary from the province of *Syria Secunda*), as well as a row of shops. Between 1975 and 1978, the excavation of these late Roman shops,[43] established in the northern side of the decumanus, unearthed remains of kilns, as well as over three hundred lamps, many of which were intact and had never been used, tossed aside on the pavement with several dozen moulds for making them (figs. 5.3 and 5.4).[44] It was recorded that these shops were partially destroyed during the Persian incursions from 613 to 628 and then completely abandoned after the rise of Islam. The artisans were relocated in the disused 'triclinos' house and the east cathedral in the early eighth century. These buildings were diverted from their domestic and religious functions to fulfil new economic purposes. Craftspeople came to settle among their unbuilt courtyards and gardens where Islamic silver coins dating from 700 to 750 were excavated. Walls were built in rubble to divide large rooms and courtyards into smaller artisanal units, where late Umayyad silver coins, kilns, vats, crucibles, and tools were unearthed (figs. 5.5 and 5.6). Simultaneously, a new marketplace emerged, along the southern side of the decumanus, with shops designed in the late antique model but solely used for retail. These discoveries illustrate Apamea's economic transition from late antiquity to early Islam. They show that the new power took steps to restore local economic life, by converting abandoned domestic and

[43] This datation to the beginning or middle of the sixth century rested on the excavation of Justinian coins struck between 527 and 565.

[44] BALTY, J. C. (1981) *Guide d'Apamée* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 104.

religious monuments into artisanal workshops and by providing Apamea with a new marketplace. Material evidence suggests a phenomenon of progressive separation between urban trade and artisanal production after 700. A pronounced differentiation was established between the street-front marketplace and the areas of craft grouped slightly further back on the remains of the 'triclinos' house.[45] The passage from the late antique *ergastērion* to the medieval *sūq* was therefore marked by the combination of replicating the facilities of the late Roman world, but with a stronger specialization in storage and sales.

Similar evidence of focusing attention exclusively on retail within Near Eastern street-front marketplaces post-700 can be found in Boṣra, Jarash, and Baysān. The retail environment looked similar to the shops of Roman times, except the production of goods within the same premises (such as in a backroom or adjacent workshop) did not now typically feature. In Jarash, for instance, archaeological clues show that the standard model of the third-century row of shops at the foot of the Temple of Zeus, which combined production and retail as suggested by the discovery of elements belonging to a twin-screw press and several hundred tools for carpentry and jewellery,[46] was not perpetuated after 700. It declined in favour of a geographical distancing between artisanal production and exchange and the increasing specialization of the medieval shops in retail. The early-eighth-century shops unearthed along the eastern wall of the Umayyad congregational mosque were thus used solely for commercial purposes and included vast storages, divided into many compartments, where shopkeepers' accounts and unused sets of late Umayyad ceramics were discovered at floor level (figs. 5.7 and 5.8).[47] The example of Jarash clearly shows how after 700 the Islamic street-shops, that replicated the late Roman model, no longer functioned as artisanal areas. The essential stages of production were now kept outside the shops, although

[45] BALTY, J. C. (1969) 'L'édifice dit au triclinos', in *Colloque Apamée de Syrie. Bilan des recherches archéologiques 1965–1968* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 105–16; JOURDAIN, C. (1972) 'Sondages dans l'insula au triclinos, 1970 et 1971', in *Colloque Apamée de Syrie. Bilan des recherches archéologiques 1969–1971* (Brussels: Centre belge de recherches archéologiques à Apamée de Syrie) 113–42.

[46] SEIGNE, J. (1981–3) 'Recherches sur le sanctuaire de Zeus', *JAP* 1: 48–9; (1985a) 'Notes préliminaires sur l'évolution architecturale du sanctuaire de Zeus à Jarash', *Syria* 62 Fasc.1/2: 162–3.

[47] BLANKE L. et al. (2007) 'From Bathhouse to Congregational Mosque: first discoveries and the urban history of Islamic Jarash', *ADAJ* 51: 177–97; WALMSLEY, A., DAMGAARD, K. (2008) 'A mosque, shops and bath in central Jarash: the 2007 season of the Islamic Jarash project', *ADAJ* 52: 119. Merchants employed marble slabs for recording the names of and debts of their customers. Once the customers had paid their debts, the shopkeepers erased their transactions, as suggested by marks showing several older layers of writing on ostraca. The accounts are unsigned, which indicates that they were private documents, not to be considered as contracts. See BESSARD, F. (2008) 'Arabic Shopkeepers' Accounts from Islamic Jarash', *ADAJ* 52: 122–6.

finishing the final product may still have taken place on the premises. This major shift towards an almost purely retail function of urban markets, with artisanal production being moved to the periphery of towns, is not attested archaeologically only in the Levant; in Central Asia similar evidence of differentiation between production and trade facilities has been uncovered in Merv and Paykand, supporting the argument of an early Islamic programme that did not simply appropriate Roman and Persian market infrastructures but also introduced a novel economic order that maximized commerce.

This geographical distancing between selling and heavy manufacturing characterized Near Eastern cities after the rise of Islam and well beyond into the second millennium. Jessica Goldberg indicates that Genizah merchants in the eleventh century could engage in manufacturing, although their primary role was to purchase, ship, and sell commodities.[48] The Geniza documents emphasize that they were 'much more active in purchasing finished goods from workshops than in organising manufacturing. [. . .] This choice probably reflected the time investments required. Purchases of finished manufactures already involved substantial travel [and] overseeing manufacturing, like organising flax-processing, required a great deal of hands on management'.[49] This transformation profoundly affected both consumers and sellers. The commercial success of the medieval Islamic world derived from this noticeable specialization in retail of marketplaces. Additionally, the greater involvement of many shopkeepers in retail (or retail combined with petty craftsmanship) can also be perceived as a manifestation of the redefinition of merchants' religious role and social status from the ninth century. It is during this period that they emerged as a new urban elite distinct from the secular aristocracy, because of their primary interest in capital and commerce rather than patrimonial landowning.

2. COVERED MARKETPLACES

In a similar way, the commercial covered areas in the first centuries of Islam were inspired by awareness of the arrangements of the late antique roofed marketplaces. Material and literary evidence confirms, however, that although they shared many formal and etymological linkages with their predecessors, institutionally there was discontinuity. From 700, they acquired their own identity, expanding dramatically in urban and non-urban contexts as well as

[48] GOLDBERG, J. (2012) *Trade and Institutions in the Medieval Mediterranean* (Cambridge: Cambridge University Press) 115–17.
[49] GOLDBERG, J. (2012) 105.

enlarging to fulfil a broader range of economic functions within the post-Roman Near East. The terminology describing covered marketplaces in early Islam is very rich. It seems that *dār*, *ẖān*, and *qaysāriyya* were mostly used for urban traders, whereas the *funduq* (hostel) seems to have been specifically built for lodging travelling traders, providing storage for their goods and places for sales.

2.1 *Funduq*

The *funduq* constituted an innovation in early Islam as suggested by Olivia Constable.[50] She argues that the institution preserved continuities in name and basic physical features of the public inns for lodging travellers of late antiquity (*foundax* or *pandocheia*[51]). Like the early-sixth-century inns of Dayr Simʿān,[52] Islamic *funduq*s were no different from regular courtyard houses. However, they took on new economic and social roles in the Middle Ages. They became commercial spaces for travellers and lodging houses for merchants. Their 'commercialization' was a critical development in the role of the institution, reflecting new economic interests in the late Umayyad and early ʿAbbāsid Empires.

[50] CONSTABLE, O. R. (2003) 'Reconsidering the Origin of the *Funduq*', *Studia Islamica* 92 (2001) 195–6; (2003) *Housing the Stranger in the Mediterranean World* (Cambridge: Cambridge University Press) 40–67.

[51] For a general discussion on the origins of the *Funduq*, see GAZAGNADOU, D. (1986) 'Une précision sur l'origine du mot arabe *Funduq*', *Studia Islamica* 64: 165–7; CAHEN, C. (1987) 'A propos du *Funduq*', *Studia Islamica* 65: 166.

[52] Numerous archaeological studies have been carried out to determine what distinctive signs characterized public late Roman inns in the Levant. Using as evidence two examples of what may have been inns from the sixth century at Babisqa and Kafr Nābo in the Limestone Massif, Georges Tchalenko argues that they were distinguished by their abundance of water troughs or by their very particular organization of space. He suggests that inns were divided into two unequal parts. The smaller domestic area included several storeys of rooms probably rented to travellers. The other part was used as a stable, but could also serve as a dormitory. However, Georges Tate has demonstrated that these hypotheses could not be retained. First of all, all the buildings that have water troughs were not necessarily inns; they may have been stables or sheep pens. And secondly, using the organization of the space as a distinguishing criterion is hardly convincing. It might have been if the buildings he was observing had been built with these divisions from the outset. But the digs at Babisqa and Kafr Nābo show that these buildings were in fact elongated with extensions and the courtyards divided up. Conversely, Georges Tate argues that Byzantine inns were no different from regular houses. Indeed, the Dayr Simʿān inn from the early sixth century, which was clearly identified thanks to its explicit inscription engraved on its lintel, resembles in every way the typical floor plan of a house. TCHALENKO, G. (1953) *Villages antiques de la Syrie du nord* 2 (Paris: P. Geuthner) 205–9; TATE, G. (1993) 'L'organisation du village en Syrie à l'époque byzantine (4e-7e siècles)', in A. Guillou (ed.) *La Civiltà byzantina oggetti e messagio: architettura e ambiente di vita* (Rome: 'L'erma' di Bretschneider) 92–4; FAUCHON, C. (2013) 'Les lieux de passage en Grande Syrie à la fin de l'Antiquité: l'apport des sources syriaques', *Cahiers "Mondes anciens"* 4: 203–23.

This conversion of the traditional inns into covered marketplaces from the time of the late Umayyads is indicated in both material and textual sources. Alan Walmsley has identified an early-eighth-century form of *funduq* in Pella in Jordan. The archaeologist mentions the existence of a 'large caravanserai' that was built in the centre, north of the cathedral, on the abandoned remains of the house of the clergy (figs. 5.9, 5.10, and 5.11). The edifice is described as double-storey accommodation consisting of rooms, porches, and balconies around an open area. The unearthing of two male bodies carrying precious goods (a golden earring, a dagger, an iron ring, three dirhams, and a dīnār dating from 712), seven camels, and a donkey, crushed by falling masonry during the earthquake of 749, supports the hypothesis that the building was used as a commercial hostelry in the first half of the eighth century. Archaeological data and the collection of coins and precious artefacts lead us to consider that the *funduq*, while continuously used as a public hostel, may also have acquired an additional role as warehouse and centre for commercial transactions.

During the late Umayyads, the emergence of *funduq*s within ports and *sūq*s, no longer isolated at city gates, is a further manifestation of their changing role. When the Umayyad caliph Hishām b. ʿAbd al-Malik (724–43) decided to move the arsenal, originally situated at Acre, to the port of Tyre, he is said to have patronized the building of a *funduq*, from which the imperial authority could derive a revenue (*mustaġall*). He was apparently motivated by a sense of pride and competition; his decision had been sparked by a conflict with a descendant of Abū Muʿīṭ who refused to sell his granaries and shops in Acre, prompting Caliph Hishām to leave Acre and settle the shipyard and develop industries in Tyre.[53] Ninth- and tenth-century literary sources equally confirm the development of this institution during the early ʿAbbāsid caliphate and its new dual functions both as hostel and roofed trading space. They also mention that the institution served a fiscal purpose and became a locus for implementing and administering governmental taxation. For instance, in his early ninth-century satire of the merchants of Baṣra in Iraq, al-Ǧāḥiẓ states that they possessed numerous *funduq*s and *ḫān*s throughout the port, whose rooms were rented at a very high price to travelling merchants. Due to Baṣra's geostrategical situation at the mouth of the Persian Gulf and its buoyant commercial life, these hostels were almost always full.[54] Similarly, further east, the tenth-century chronicler al-Masʿūdī relates that the governor of Tabaristan under Caliph al-Muqtadir (908–29) ordered an accounting for tax purposes of all of the markets and city quarters in Rayy, including a census of all local 'Muslims and non-Muslims, as well as foreign merchants and other travellers [staying] in the *funduq*s of the city'. Al-Masʿūdī makes here a clear

[53] AL-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 117–18.
[54] AL-ǦĀḤIẒ (1948) *Kitāb al-buḫalāʾ* (Cairo: T. al-Hajiri) 82.

connection between *funduq*s and commercial lodging, which confirms that the new institution preserved important aspects of its predecessor, while evolving to fill a mercantile role in the Islamic world. Ibn Ḥawqal points out the economic importance that this institution gained over the course of centuries, when describing tenth-century Nishapur. He reports that the city hosted several *funduq*s, each of them known for a particular variety of merchandise. They served as centres of trade for both wealthy traders and merchants of more modest means.[55] They also functioned as sites where urban administrators could monitor the activities of merchants. In the sources of the ninth to the eleventh centuries, the very frequent references to *funduq*s make clear that they became a common component of urban infrastructure, facilitating interregional trade.

2.2 *Dār*, *ḫān*, and *qaysāriyya*

As the Near East fell under Muslim authority, late antique roofed marketplaces[56] in the Levant—such as the *macellum*—and Persia were absorbed. While covered commercial spaces were generally renamed *dār*, *ḫān*, and *qaysāriyya* in Arabic, their design—rectangular in shape with stalls organized around a central courtyard—perpetuated the late antique legacy. For instance, the eighth-century accounts of the traditionalists Ibn Abū Ġassān and Ibn Zabāla on the late Umayyad markets of Medina, later collected by al-Samhūdī, show that the holy city hosted two large covered *dār*s founded by Caliph Muʿāwiya (661–80).[57] They were built in the Bakī al-Zubayr quarter, near the mosque attached to its *qibla* wall indicating the direction of the Kaaba in Mecca. Saʿd b. ʿAbd al-Raḥmān al-Zarkī was in charge of their construction and designed them with a series of shops distributed over two floors, around a courtyard. According to Ibn Abū Ġassān and Ibn Zabāla, the shops operated independently from each other, under the supervision of individual merchants. Both covered marketplaces were protected by wooden doors, which were locked up at night. To them was attached a private *muṣallā*, which was an open space for praying.[58] This account gives confirmation of the urban centrality that was given to trade in eighth-century Medina. The source also

[55] We can suppose that the price to pay to stay was not fixed by the authority but by the keeper of the *funduq*, as was the case in Islamic ribāṭs. Ibn Ḥawqal reports that Abū al-Ḥasan in the Central Asian city of Sarmandj welcomed and hosted travellers in his ribāṭ for one dīnār per day. IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Brill: De Goeje) 518.

[56] USCATESCU, A., MARTIN-BUENO, M. (1997) 'The Macellum of Gerasa (Jerash, Jordan): From a Market Place to an Industrial Area', *BASOR* 307: 67–88; DENTZER, J. M., BLANC, P. M., FOURNET, T. (2002) 'Le développement urbain de Bosra de l'époque nabatéenne à l'époque byzantine: bilan des recherches françaises 1981–2002', *Syria* 79: 75–154.

[57] See Chapter 2

[58] AL-SAMHŪDĪ, 2 (1955) 750–2.

illustrates the organizational similarities between early Islamic covered marketplaces and late antique roofed commercial buildings.

The same pattern of shops aligned around a central courtyard has been uncovered at Apamea in the east cathedral in the 'triclinos insula'. Between 1966 and 1978, the Belgian excavation of the east cathedral led to the discovery of a series of medieval shops built around the entrance courtyard. The shops leaned up against the colonnade, which was blocked with walls of spolia and rubble (fig. 5.12, 5.13, and 5.14). A profusion of objects in iron, dozens of nails, numerous hinges, fragments of door frames, eight folding stools, and a bronze tripod were unearthed within the shops. The material led to the supposition that the shops probably formed a kind of covered marketplace of ironmongers. The arrangement of the shops around a central courtyard, following the model of Medina, led the archaeologists to define it as a *qaysāriyya* or *dār*, whose function was a 'specialized covered marketplace'.

However, although *dār*, *ẖān*, and *qaysāriyya* were specialized trading sites as their late antique predecessors, they were modified to suit the expanding commercial needs of the early Islamic world. Evidence indeed suggests that they did not exclusively cater to a luxury market anymore. For instance, the four *qayāsir* of Fusṭāṭ in Egypt, that the Umayyad governor ʿAbd al-Azīz had built in the late seventh century, sold common goods, such as honey, ropes, sheep, and linen.[59] Similarly, we are told that the city of Kūfa in Iraq included numerous covered marketplaces providing for the everyday needs of the community under the governorate of H̠ālid al-Qasrī (723–37). Those specializing in the retail of basic commodities were spread throughout the urban fabric, such as the *dār al-qaṣṣārīn* that was dedicated to textiles and benefited from a central location.[60] Only those marketplaces which were deemed as posing a risk of pollution or disease were excluded and relegated to sites beyond the city walls, such as butchers (*dār al-ǧazzārīn*).[61] These ninth-century descriptions of Fusṭāṭ and Kūfa show that despite continuity with late antiquity in their structure, early Islamic covered marketplaces saw a diversification of products for sale. Yet, it has to be remembered that these accounts come from ninth-century chronicles, and therefore this evolution in the function of covered marketplaces could well have emerged only during the early ʿAbbāsid era of the chroniclers' own time, and the claim of their Umayyad origin be no more than an anachronism.

The marketplaces prevalent in the first centuries of the Islamic Near East reveal the major influence that the Byzantine (and ultimately Roman) and

[59] IBN ʿABD AL-ḤAKAM (1966) *Sīrat ʿUmar b. ʿAbd al-ʿAzīz* (Damascus: Maktaba al-ʿarabiyya) 136.

[60] AL-ṬABARĪ (1962–1969) *Ta'rīẖ al-rusul wa al-mulūk* 4 (Cairo: Dār al-maʿārif) 532; 6 (1962–9) 89.

[61] AL-BALĀḎURĪ (1998) *Ansāb al-ašrāf* 3 (Damascus: Dār al-yaqaẓat al-ʿarabiyyat) 250.

Sasanian heritage played in the formation of commercial spaces after the Muslim conquests. Many pre-existing architectural forms were simply adopted and renamed. This most likely arose from the absence of purpose-built commercial architecture in pre-Islamic Arabia, from whence the Muslim authorities came. However, the function of these replicas was innovative. The positive attitude derived from early traditions given towards wealth creation (as long as it was conducted within certain moral boundaries) materialized in the growing conversion of marketplaces as solely retail areas. Medieval marketplaces were more specifically dedicated to retail than their predecessors. Although specialized trading space such as *macella* existed in the high-imperial Roman world, the usual coexistence of production and retail in a single space was no longer perpetuated after the rise of Islam. In the same spirit, covered marketplaces were democratized by broadening participation through allowing the sale of non-luxury goods.

While most Carolingian marketplaces were used to supplement an income from estates, medieval commercial institutions in early Islam, by contrast, developed as a discrete and distinct method of wealth creation. In Carolingian Europe, the economy functioned on a pattern of local trade, without any sort of orientation towards long-distance exchange.[62] This condition left only a limited field of action to commerce. Trade took place in a small number of natural and manufactured commodities, which arose from an excess of production. Most marketplaces we know in western Europe were local.[63] The multiplicity of seigniorial monopolies and tolls, the scarcity and difficulty of means of transport, as well as the imperfection of instruments of credit, were all obstacles to the circulation of merchandise. By contrast, Arab-Muslim elites were pragmatic in their approach, bringing or keeping what was useful from the late antique, Roman, and Sasanian legacy, and reappropriating or upscaling to serve economic ambitions centred on expanding trade.

[62] COSTAMBEYS, M., INNES, M., MACLEAN, S. (2011) *The Carolingian World* (Cambridge: Cambridge University Press) 353–75.

[63] BRUAND, O. (2002) *Voyageurs et marchandises aux temps carolingiens. Les réseaux de communication entre Loire et Meuse aux VIIIe et IXe siècles* (Brussels: De Boeck Université) 145–6.

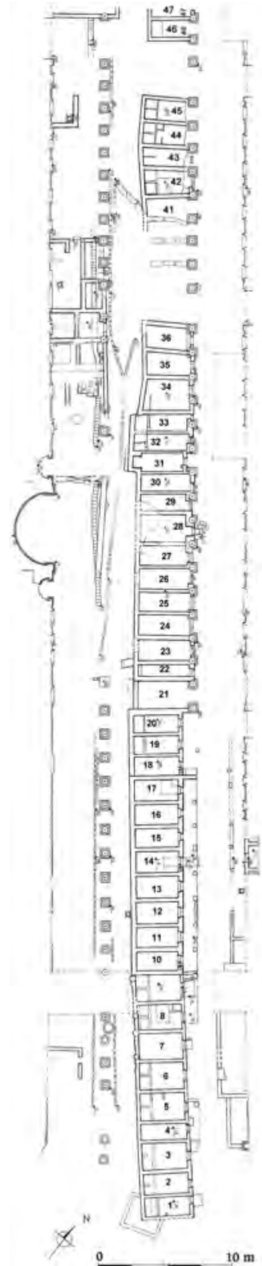


Fig. 5.1 Palmyra: plan of the Umayyad *sūq* along the decumanus (dig by Stepniowski and kh. Al-As'ad, 1985–6). (Kh. Al-As'ad, 1989)



Fig. 5.2 Palmyra: general view of the Umayyad *sūq*. (© F. Bessard)

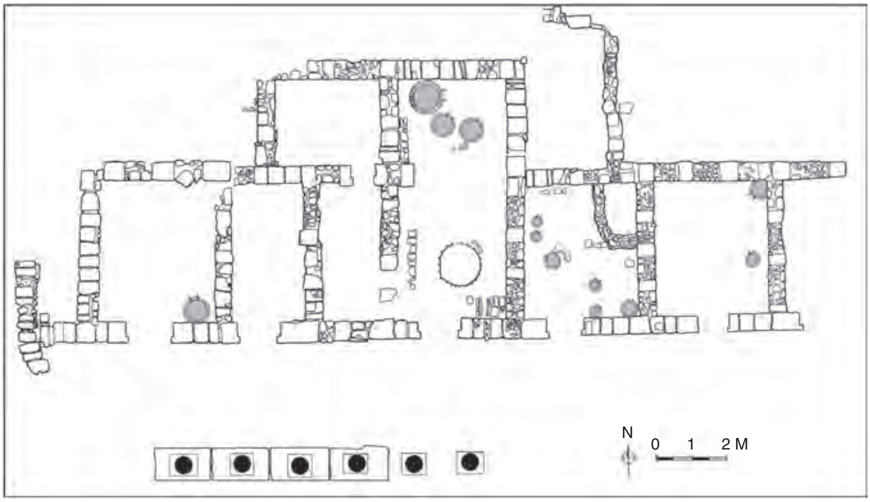


Fig. 5.3 Apamea: plan of the late Roman *ergastēria* built along the northern side of the south decumanus. These shops were used both as production and retail facilities. Twelve kilns dated from the sixth century have been uncovered in the shops. (© F. Bessard, after drawings collected in the archives of Belgium expedition of Apamea at the Académie Royale de Bruxelles)



Fig. 5.4 Apamea: detail of the late Roman *ergastēria* built along the northern side of the south decumanus. (© F. Bessard)



Fig. 5.5 Apamea: in the 'Triclinos House', detail of the colonnade of the monumental courtyard blocked by walls built from rubble during the Umayyads. (© F. Bessard)



Fig. 5.6 Apamea: in the 'Triclinos House', detail of a large vat built in the central courtyard against a wall constructed between the colonnade of the peristyle during the Umayyads. (© F. Bessard)

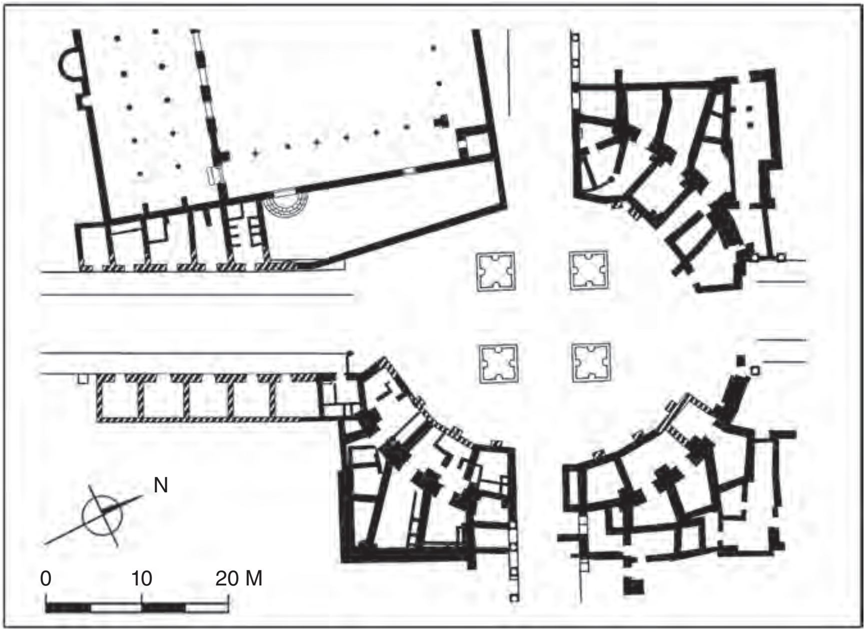


Fig. 5.7 Jarash, plan of the *sūq*. (Courtesy of Alan Walmsley, Islamic Jarash Project 2006–8)



Fig. 5.8 Jarash, *sūq* along the cardo: detail of shop 5. (© F. Bessard, Islamic Jarash Project 2006–8)

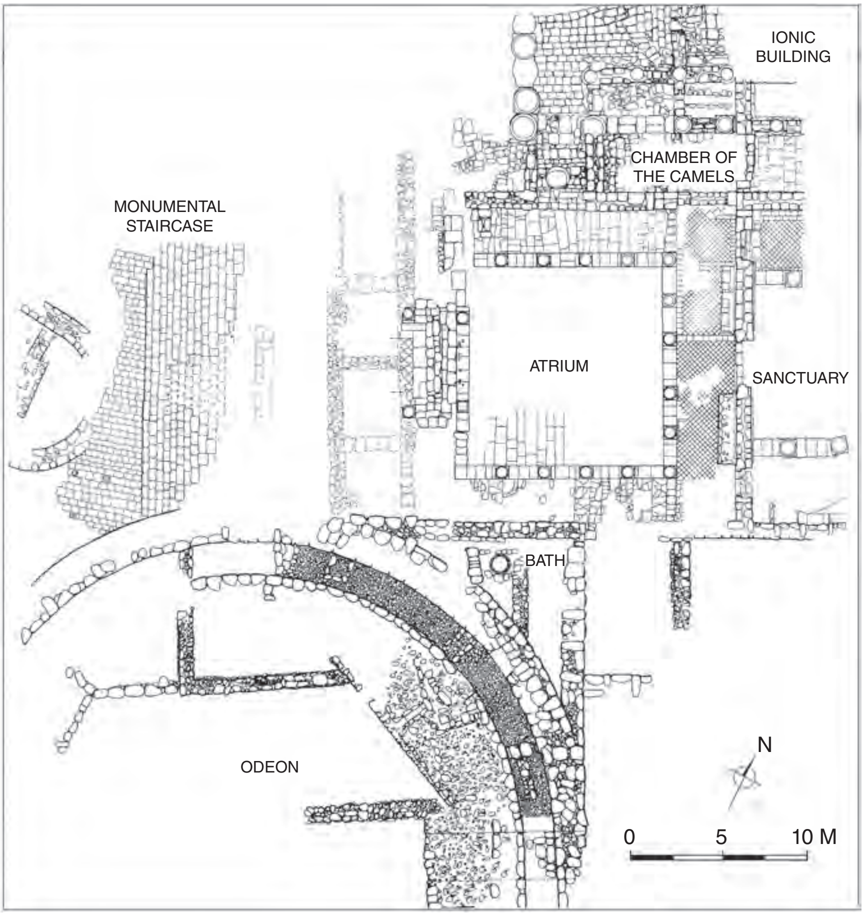


Fig. 5.9 Pella: plan of the atrium and the residence of the clergy along the late Roman basilica of sector IX. These buildings were reoccupied under the Umayyads and used for economic purposes. (McNicoll, 1982)

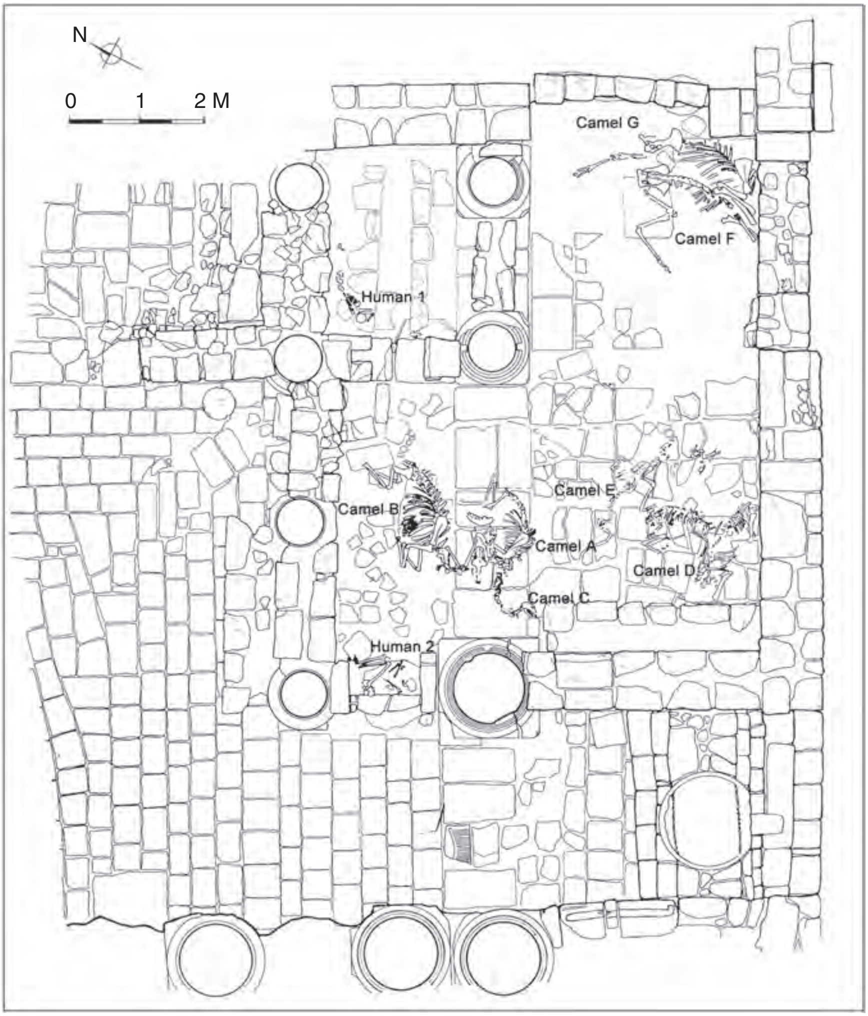


Fig. 5.10 Pella: plan of the former residence of the clergy along the late Roman basilica in sector IX. This building most likely became a *ḫān* under the Umayyads. (McNicoll, 1982)



Fig. 5.11 Pella: wall made of reused material in the south-west angle of the courtyard of the residence of the clergy along the basilica in sector IX. At the time of the Umayyads, it enclosed the open access of the atrium courtyard, to create a trading space. (© F. Bessard)

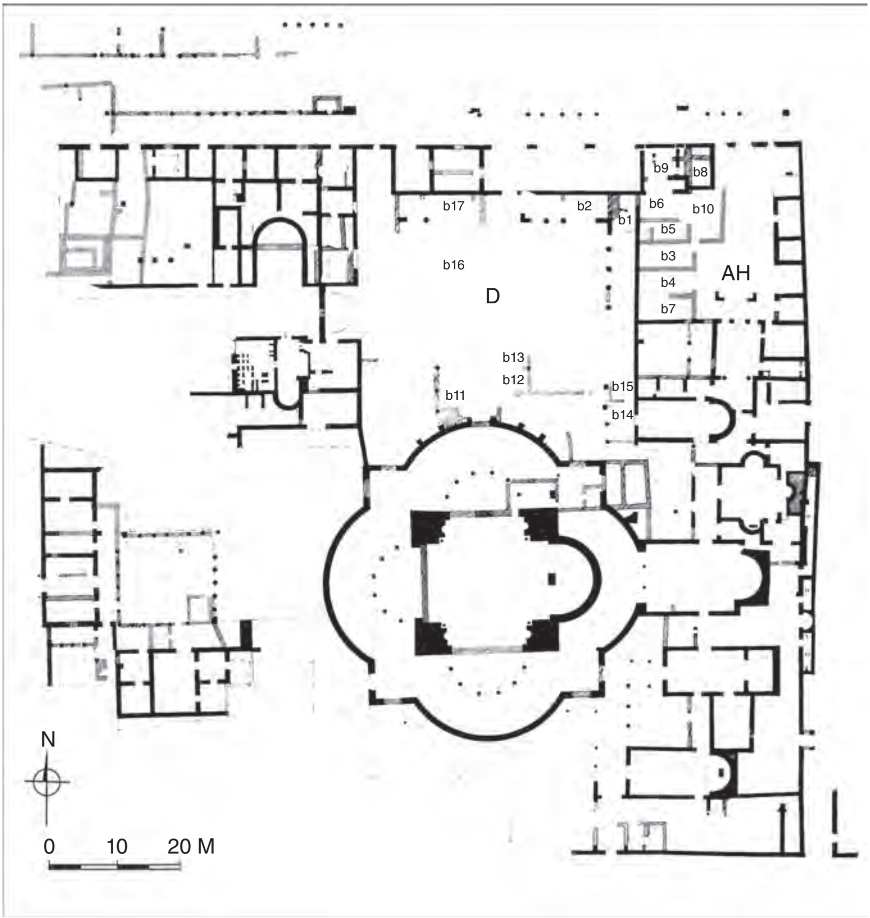


Fig. 5.12 Apamea: plan of the disused eastern cathedral in the early eighth century. In grey are highlighted the early Islamic walls built to compartmentalize the large room AH into smaller artisanal units and arguably convert the courtyard D into a *qaysār-iyya*. (Balty, J.-C. 1972, fig. LXXVI–1)



Fig. 5.13 Apamea: in the courtyard D of the eastern cathedral, detail of the remains of a wall built between the columns of the peristyle in the early eighth century. (Balty, J.-C. 1972, fig. LXXVI–1)



Fig. 5.14 Apamea: detail of walls built in rubble to compartmentalize the large room AH of the eastern cathedral into small workshops. (© F. Bessard)

Conclusion to Part II

From 700, the early Islamic economy remained strongly aligned with its late antique heritage, which brought a definite rupture between the Near East and Europe. Robin Fleming shows that Britain's towns fell into total decay after the departure of the Roman legions.[1] The prominence of the urban marketplace in the Near East in the early Middle Ages certainly contrasted with Carolingian Europe in that the European systems of exchange mostly took place in the form of weekly rural markets.[2] Nevertheless, this clear permanence of the traditions inherited from antiquity did not prevent Near Eastern markets and industries from acquiring original specificities after the Muslim conquests, as altered patterns of consumption and investment emerged.

Production activities experienced a significant upheaval, marked by the passage from an individual to a collective system of labour. This technological change affected all crafts concurrently. The ninth century represented a rupture, with the development of large workshops organized on a division of labour basis, as evident in Tiberias, Raqqa, and Central Asia. By contrast, the construction and social functioning of the markets remained rooted in the Roman heritage. Whether in terms of the *sūq*s or covered markets, boutiques continued to be built and organized on the antique model. The perpetuation of the late Roman traditions after the Muslim conquests meant that the emerging structure of the market in early Islam diverged in its form and function from both the markets of pre-Islamic Arabia and contemporary Carolingian Europe. Following the late antique model, the early Islamic *sūq*s may have kept a form of elementary production, alongside boutiques dedicated solely to trade. However, this form of artisanal activity was less common. A bifurcation seems to have occurred with reification of productive and commercial functions now having their own facilities, and in consequence a clear distinction growing up between producers and merchants.

[1] FLEMING, R. (2011) *Britain after Rome: The Fall and Rise, 400 to 1070* (London: Penguin).
[2] VERHULST, A. (2002) *The Carolingian Economy* (Cambridge: Cambridge University Press) 90–1.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020).
DOI: 10.1093/oso/9780198855828.001.0001

Part III

Institutional and Religious Generators

6

Money Supply and Currency

On the eve of the Arab-Muslim conquests, the Byzantine and Sasanian worlds were not short of money supply. In Byzantium, there circulated golden solidi, semisses, and tremisses, as well as copper folles, while the Sasanian monetary system was based on silver with drachms struck all over the Empire. Golden solidi and silver drachms were both relatively pure coins, seeing an increase in production in late antiquity, according to Jairus Banaji, to support military expansion (in particular the Byzantine–Persian wars), to pay wages,[1] and for trade—solidi were used all around the Mediterranean world and in the banking system, while drachms circulated widely along the so-called 'silk roads' to China. In the Tépé Maranjān hoard[2] *c.*385 near Kabul, as well as the treasures of Turfan's tombs,[3] several hundred drachms were found, illustrating the prosperity of Sasanian commerce in Central Asia between the fourth and early seventh century. While copper coins gradually disappeared in western Europe, they remained in use for local daily transactions in the East Roman and Sasanian worlds; many specimens having been discovered in sixth- and early-seventh-century marketplaces, such as Ephesos, Sardis, and Aphrodisias in western Anatolia, Jarash and Pella in southern Levant, as well as Istakhr in Iran.

In the Middle Ages, Arab-Muslims inherited the massive coin stocks struck by Byzantium and Iran to support their war efforts in the sixth and early seventh centuries. Up to the late seventh century, solidi and drachms continued

[1] Most wages were paid in solidi—estate managers, local garrisons, artisans—except wage earners on casual employment who could be paid with copper coins. See BANAJI, J. (2012) 'The Economic Trajectories of Late Antiquity', in S. Johnson (ed.), *The Oxford Handbook of Late Antiquity* (Oxford: Oxford University Press) 608.

[2] CURIEL, R. (1953) 'Le trésor de Tépé Maranjān: une trouvaille de monnaies sasanides et Kušano-sasanides faite prés de Caboul', in R. Curiel, D. Schlumberger (eds.) *Trésors monétaires d'Afghanistan* (Paris) 102.

[3] SKAFF, J. K. (1998) 'Sasanian and Arab-Sasanian Silver Coins from Turfan: Their Relationship to International Trade and the Local Economy', *Asia Major*, 3rd series, II/2: 67–115. See also Jairus Banaji's discussion of the Tépé Maranjān hoard and the treasures of Turfan in BANAJI, J. (2016) *Exploring the Economy of Late Antiquity* (Cambridge: Cambridge University Press) 130–1.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard, Oxford University Press (2020). © Fanny Bessard.
DOI: 10.1093/oso/9780198855828.001.0001

to circulate, Arab-Muslims making use of the available stocks, countermarking '*tayyib*' late antique coins with the image of the cross and the Byzantine emperor, and also imitating Constans II's and Heraclius'[4] issues.[5] There was no immediate need to change the monetary systems, as most subjects were non-Muslims, or to produce more coins, given that there was already money aplenty to maintain economic prosperity.[6]

The situation changed from the reign of ʿAbd al-Malik (685–705) and the second *fitna*. With the rise of the 'counter-caliph' Ibn al-Zubayr, the caliph felt the need to assert the Umayyad's imperial authority to keep the unity of the *umma*. His famous reform of coinage was used to impose the Umayyads' ideology through the use of new Islamic currencies: the golden dīnār, silver dirham, and the copper fals of standard weight and purely epigraphic design.[7] Christian iconography was replaced by brief declarations of Islamic faith acting as symbols of political propaganda, emphasizing the differences between Christianity and Islam, the caliphate, Western Christendom and Byzantium.[8] This evolution of coinage has given rise to an abundance of literature, developing from the seminal work of John Walker in the 1950s. While historian Hugh Kennedy argues that this reform occurred in response to the professionalization of the armies and served to generate a uniform currency to pay the caliph's soldiers,[9] Luke Treadwell explains that it introduced a unity and degree of control, which had been lacking under the Sufyānids. While the ideological roots of the reforms have been extensively

[4] GOODWIN, T. (1993) 'Imitations of the folles of Constans II', *ONS* 28.

[5] WALMSLEY, A. (2000a) 'Production, Exchange and Regional Trade in the Islamic East Mediterranean', in I. L. Hansen, C. Wickham (eds.) *The Long Eighth Century* (Leiden: Brill) 265–343. See the volume on Byzantine and Arab coinage in the seventh-century Near East recently edited by Tony Goodwin that includes studies of Arab-Byzantine mints. GOODWIN, T. (2017) (ed.) *Coinage and History in the Seventh Century Near East 5* (London: Archetype).

[6] BANAJI, J. (2016) 126 suggests that in the seventh century the 'Arabs relied on the existing stock of gold currency, that is, the stock of solidi in circulation in Syria and Egypt, and that this must have been very substantial indeed to allow the early administrations to function for over fifty years without fresh stocks of currency'. Luke Treadwell says that 'there is every reason to believe that the early Muslim attitude towards coinage aimed to maintain economic prosperity by retaining the monetary mechanisms inherited from Late Antiquity.' TREADWELL, L. (2005) '"Mihrab and ʿAnaza" or "Sacrum and Spear?" A reconsideration of an early Marwanid silver drachm', *Muqarnas* 22: 17.

[7] GRIERSON, Ph. (1960) 'The Monetary Reforms of ʿAbd al-Malik b. Marwān: their Metrological Basis and their Financial Repercussions', *JESHO* 3(3): 246–7.

[8] BACHARACH, J. (2010) 'Signs of Sovereignty: the Shahāda, Qur'anic verses and the coinage of ʿAbd al-Malik', *Muqarnas* 27: 1–30. See also WASSERSTEIN, D. J. (1993) 'Coins as Agents of Cultural Definition in Islam', *Poetics Today – Cultural Processes in Muslim and Arab Societies: Medieval and Early Modern Periods* 14/2: 303–22, who examines how early Islamic coins with their specific signs and codes were used to stress the differences between Christianity and Islam, the caliphate, Western Christendom and Byzantium.

[9] KENNEDY, H. (2001) *The Armies of the Caliphs. Military and Society in the Early Islamic State* (London: Routledge) 59–95. See also CRONE, P. (2003) 'The Pay of Client Soldiers in the Umayyad Period', *Der Islam* 80/2: 285–92.

explored, their economic impact remains understudied. To what extent did ʿAbd al-Malik's aniconic coins foster trade within and outside the Islamic world? Following ʿAbd al-Malik's monetary reform, the late Umayyads and ʿAbbāsids began to locate and secure fresh metal supplies in Africa, Transoxiana, Iran, and Arabia. While coinage was in ready supply, how essential was the influx of precious metals from the development of mining in the continued monetization of the Near East? Working from ʿAbd al-Malik's reforms, the chapter explores how the economic prosperity in the eighth to tenth centuries was supported by considered and targeted monetary policies, that led to the gradual decline and eventual disappearance of late antique coinage and the merging of Byzantium and Persian monetary worlds.

1. OUT WITH THE OLD . . .

While ʿAbd al-Malik's reforms were fundamental in the assertion of the Umayyad imperial authority after the second *fitna*, they also supported the development of a single monetary zone. Egypt, Greater Syria, Iraq, Iran, and Central Asia, which had contrasting monetary systems for centuries, now enjoyed common currencies. Eliminating the cost of converting currencies, the adoption of the Islamic dīnār, dirham, and fals in the caliphate 'created the conditions for monetary-exchange stability'.[10] These currencies were moulded after the Roman-Persian coins, although their weight was considerably lower. The dirham weighed 2.97 g, which was about half a gram less than the Sasanian drachm, whose weight varied between 4 and 4.24 g, while the dīnār weighed 4.25 g, a tenth of a gram less than a late Roman solidus.

Subsequently, the old heavier currencies were either hoarded or melted down, the dirham becoming the preferred money of local exchange. Byzantine and Arab-Byzantine solidi of 4.37–4.38 g did not remain in circulation for long after ʿAbd al-Malik's reforms. The almost complete absence of early-eighth-century dies used to mint Arab-Byzantine pieces and the increased number of dies to strike Islamic dīnārs[11] suggest that the production of Arab-Byzantine solidi ceased, while the new lightweight dīnār flooded the market. Although this does not prove that the Byzantine solidus immediately disappeared, as Jere Bacharach notes, it is most likely that 'anyone who held gold [. . .] would immediately want to use the new-style dīnārs because every time they used the old gold solidi and paid by number, they lost

[10] BLANCHARD, I. (2001) *Mining, Metallurgy and Minting in the Middle Ages: Asiatic supremacy*, vol. 1 (Stuttgart: Franz Steiner) 109.

[11] TREADWELL, L. (2009) 'ʿAbd al-Malik's Coinage Reforms: the Role of the Damascus Mint', *Revue Numismatique* 165: 357–81.

money in the exchange. Within Muslim lands where gold was used, which must have meant Syria and possibly Egypt, the new dīnārs quickly dominated the market as they drove out the older solidi'.[12] The old stock of golden solidi was probably melted down to create dīnārs. This would explain the uniformity of eighth-century hoards of gold coins found in Syria and northern Mesopotamia, according to Stefan Heidemann.[13]

The old Sasanian drachm also remained in circulation up to the early eighth century. From the reign of Caliph Muʿāwiya[14] (661–80), late antique drachms were cut or cropped in order to lower their standard weight, so that they did not disappear in private hoards because of their intrinsic value when the lighter 'Arab-Sasanian' silver dirham was put into circulation. This finds an illustration in Stefan Heidemann's study[15] of the drachms of the Damascus hoards (Bāb Tūmā and Sāḥat al-Taḥrīr), which were buried between 741 and 747. He argues that drachms were cropped, so that their weight became closer to that of the Arab-Sasanian dirham. This practice, deemed fraudulent by theologian Malik b. Anas, was, however, tolerated by the authorities[16] in a display of pragmatism. Indeed, in a context where silver currency was the base unit used for financial operations by the Dīwān and was used to pay the salaries (*ʿaṭā'*) of the military units based in Iraq,[17] such a practice allowed the drachm to remain in circulation to prevent a shortage of coins.

However, in 697, ʿAbd al-Malik's reforms and further decrease of the silver dirham's weight from around 3.60–3.70 g to 2.97 g, while establishing its fineness at a 94-per-cent fine metal ratio—according to Z. al-Saad's analysis[18] which was carried out on twelve dirhams struck in Wāsiṭ between 708 and 741—caused the final decline of the old silver currency. Stuart Sears, Donald T. Ariel, and Alan Walmsley believe that the drachm stopped being used in transactions at the beginning of the eighth century, after being officially banned from circulation in 697. The silver hoards of Damascus (eighth century) found in Umm Hajarah (3,815 coins) and Bāb Tūmā (854 coins),[19] which held a mix of Sasanian and Arab-Sasanian drachms, as well as a few Islamic dirhams, bear no testimony to the enduring circulation of those ancient currencies after the Umayyad coinage reforms, but rather to the process of hoarding ancient currencies for their precious metal. An extract from al-Damīrī's chronicle confirms that Caliph ʿAbd al-Malik implemented a

[12] BACHARACH, J. (2010) 'Signs of Sovereignty: The Shahāda, Qur'anic Verses, and the Coinage of ʿAbd al-Malik', *Muqarnas* 27: 21.

[13] HEIDEMANN, S. (1998) 'The Merger of Two Currency Zones in Early Islam', *Iran* 36: 96.

[14] FOSS, C. (2002) 353–65.

[15] HEIDEMANN, S. (1998) 95–112.

[16] HEIDEMANN, S. (1998) 105–7.

[17] KENNEDY, H. (2001) 59–73.

[18] AL-SAA'D, Z. (1999) 'Chemical Analysis of Some Umayyad Dirhems Minted at Wāsit', *JESHO* 42(3): 351–63.

[19] AL-USH, M. (1972) *The Silver Hoard of Damascus* (Damascus); GYSELEN, R., KALUS, L. (1983) *Deux trésors monétaires des premiers temps de l'Islam* (Paris: BNF).

policy of strict repression against those who kept using the ancient coins. As the issue of the dirham was a key element of the Arabization of society at the end of the seventh century, the prospect of continued use of ancient currencies is likely to have been seen as a challenge to the authority of the caliph.[20]

Similarly, the Byzantine copper follis did not remain in circulation in the Levant after ʿAbd al-Malik's reforms. However, its decline did not result from the reform of the currency's weight. While its design changed, ʿAbd al-Malik's reforms played a role in the eclipse of the old follis because production of Islamic fulūs to the discretion of local governors became extremely widespread. Lutz Ilish[21] indicates that they were struck in almost every province of the Empire from the late seventh century, except on the fringes of the caliphate in the first century of Islam.[22] In each province of the Near East, however, one main workshop was in charge of most of the production, the others only playing secondary, if not marginal, roles. The exceptional diversity of copper coins illustrates this lack of centralization in their emission in early Islam. Copper coins of the eighth and ninth centuries could be ornamented either with dots, circles, or crescents, as shown in the diversity of obverse types of emission from al-Mosul between 715 and 749.[23] The mint and those responsible for the issue arguably had complete freedom in the production of the copper money. Besides, the lack of a centralized emission of copper coins meant that the fulūs did not necessarily weigh the same or bare the same inscription. As mentioned by Jere L. Bacharach, 'the triumph of the all-epigraphic coinage [and the eclipse of old currencies] was [therefore] based on monetary factors [. . .] "bad" money driving out "good".'[24]

2. COINAGE IN COMMON

The production of dirhams, dīnārs, and fulūs played a fundamental role in aiding regional trade in the Near East by unifying Egypt, Greater Syria, and

[20] AL-DAMĪRĪ (1954) 173.

[21] ILISH, L. (2010) 'Abd al-Malik's Monetary Reform in Copper and the Failure of Centralization', in J. Haldon (ed.) *Money, Power and Politics in Early Islamic Syria* (Burlington: Ashgate) 125–46.

[22] The excavations of Merv and Penjikent have uncovered very few copper coins. The earliest known Umayyad reformed fulūs found in the eastern fringe of the caliphate came from Balḫ and is dated to 93 Hegira. See SCHWARZ, F. (2002) *Sylloge Numorum Arabicorum Tübingen, Balh und die Landschaften am oberen Oxus* (Tübingen: Ernst Wasmuth) 65 nos. 450–4. Similarly, in North Africa (Ifrīqiya), Mūsā ibn Nuṣayr still emitted Latin-inscribed coppers with imperial busts in Tripoli. See WALKER, J. (1956) 59–62.

[23] ROTTER, G. (1974) 'The Umayyad Fulūs of Mosul', *The American Numismatic Society Museum Notes* 19: 165–98.

[24] BACHARACH, J. (2010) 21.

Iraq, which had contrasting monetary practices in late antiquity. The standardization of currencies meant that silver and gold coins were treated as equal, regardless of their mint origin, and payments were calculated by number and not weight.

Golden dīnārs were struck exclusively in the imperial capital (Damascus[25] under the Umayyads, then Baghdad) and were used to pay taxes in Egypt and Syria predominantly, as well as the salaries of officials—such as governors or judges.[26] Their production began under the caliphate of ʿAbd al-Malik,[27] as recorded in the contemporary testimony of the religious scholar Abū al-Zinad ʿAbd allāh b. Ḏakwan (d. 750), later reported by al-Balāḏurī. Abū al-Zinad attributes to the sovereign ʿAbd al-Malik the first imperial mint of Islamic golden coins in Jumada 72, i.e. October–November 691.[28] From 691 to 750, the Umayyads entrusted religious scholars to control the production on their behalf, such as the traditionalist ʿAlī b. Abī Ḥamla al-Dimašqī (d. 773), who acquired this responsibility during the reign of ʿUmar II.[29]

By contrast, the minting of the silver dirham spread remarkably rapidly across the Near East, and its use in everyday transactions[30] progressively rendered the circulation of bronze coins obsolete.[31] The treasures of early Islamic silver coins, buried in the eighth and ninth centuries in Syria, Ǧazīra, Iraq, and Oman, provide quantitative information on coin production and circulation in the first centuries of Islam. These hoards were buried after the fall of Umayyad Caliph Marwān II in 750 and at the end of the reign of Hārūn al-Rašīd in 809, when fratricidal wars erupted between al-Amīn and al-Ma'mūn. Sixteen hoards have been uncovered, suggesting that, from 680, silver coins were minted in Syria (Damascus, Ḥimṣ) and in Iraq (Baṣra, Kūfa, Wāsiṭ) and that their production was augmented from 691 by the activity of secondary mints in Ǧazīra (Ḥarrān). Up to 750, the production of silver

[25] TREADWELL, L. (2009) 357–82.

[26] Wadād al-Qāḍī has published a fascinating study of the salary of judges in early Islam based on reports gleaned mainly in al-Kindī and al-Wakī, recording evidence about the procedure of payment, the amounts, and the currencies—gold essentially in Egypt. AL-QĀḌĪ, W. (2009) 'The Salaries of Judges in Early Islam. The Evidence of the Documentary and Literary Sources', *JNES* 68/1: 9–30.

[27] The Syriac Maronite chronicle from the late seventh century states that Muʿāwiya would have, however, struck gold and silver coins soon after his accession to the throne in 661. FOSS, C. (2002) 'A Syrian Coinage of Muʿawiya?', *RN* 6(158): 353–65.

[28] AL-BALĀḎURĪ (1866) 469.

[29] IBN ḤAǦAR AL-ʿASQALĀNĪ (1907–9) *Tahḏīb al-tahḏīb* 7 (Hyderabad) 314.

[30] AL-BALĀḎURĪ (1866) 469 includes a discussion about coinage, and in particular how dirhams were progressively refined and became strictly use for urban exchange from the reign of Yazīd b. ʿAbd al-Malik.

[31] ILISH, L. (2010) 143. Bronze coins were consequently abandoned between the late eighth century and the late ninth century, until the twelfth century depending on the regions of the caliphate. See for instance for southern Levant, N. Schindel's theory that copper coinage declined as early as 750. SCHINDEL, N. (2006) 'The End of Umayyad Coinage in Southern Bilad al-Sham', *INR* 1: 137–50.

dirhams developed in these major urban and administrative centres, although the manufactory of Wāsiṭ remained the most prominent one, according to the *History of Wāsiṭ* by Ibn Baḥšal al-Wāsiṭī (d. 902), because of the proximity of the silver mines of Iran and Central Asia in Ḫurāsān, ma'din Šāš, and ma'din Benġir.[32] However, from 750, monetary evidence suggests that the mints of Wāsiṭ, Damascus, and Ḥarrān progressively declined. Those of Kūfa and Baṣra remained active, but their production, when the need arose, became more and more sporadic. This evolution of silver coinage between 700 and 750 comes to light through the analysis of the treasures of Sāḥat al-Taḥrīr[33] (Damascus), Qamišliyya[34] (Ǧazīra), and Ǧazīra.[35] The hoarded coins were struck in both Iraq and Syria in the early eighth century. They were essentially produced in Wāsiṭ. Some of them bear the mark of the secondary manufactories of Baṣra, Kūfa, and Sāmiyah, and a very few were struck in the local mints of Abarqubāṯ, Anībār, Nahr Būq, and Mubārakah.

During the rule of the ʿAbbāsids, the minting of gold and silver coins was progressively centralized in Baghdad,[36] according to literary sources and the evidence provided by the silver treasures of Ǧazīra and Sināw[37] in Oman. In the treasure of Ǧazīra, it is noticeable that the dirhams struck from 750 to 762 were still issued in Kūfa and Baṣra. By contrast, the silver coins produced after 762 mostly came from Baghdad, illuminating the decline of local mints in Iraq and the Levant to the benefit of the centralization of coinage in the ʿAbbāsid capital. It provides confirmation that Baghdad emerged as the predominant centre for coin minting, with occasional contributions from al-Rāfiqa after 800, as well as Kūfa and Baṣra up to 820. The study of the Sināw silver treasure provides similar conclusions.

From the early eighth century, the dirham became the common trading medium across the Near East and Central Asia for daily transactions, as well as the preferred currency in eastern Europe for the purchase of slaves. The hoards of dirhams buried in the markets of Baysān, Jarash, and Pella before

[32] IBN BAḤŠAL (1967) *Ta'rīḫ Wāsiṭ* (Baghdad: Gurguis ʿawwād) 44–5.

[33] ABU AL-FARAJ, M. (1972a) *The Silver Hoard of Damascus* (Damascus: DGAM).

[34] GYSELEN, R., KALUS, L. (1983) *Deux trésors monétaires des premiers temps de l'Islam* (Paris: BNF).

[35] GYSELEN, R., NEGRE, A. (1982) 'Un trésor de Ǧazīra', *RN* 6(24): 170–205.

[36] According to T. El-Hibri, the decline of provincial mints in favour of the mint at Baghdad was accompanied by significant reforms under the caliphate of al-Ma'mūn, in script from angular to curvilinear Kufic, the diameter of the dīnārs, and the standard of fineness of golden coins. Changes of religio-political nature also occurred with the introduction of the Victory verse in the outer margins of coins and the trend towards anonymity. This omission of the name of the mints could be interpreted in administrative terms either as a result of shortage of mint outputs or as a conscious attempt to raise the status of Baghdad as one of the principal centres for coinage production. EL-HIBRI, T. (1993) 'Coinage Reform under the ʿAbbāsid Caliph al-Ma'mūn', *JESHO* 36: 58–83.

[37] LOWICK, N. (1990) 'The Sināw Hoard', in *Islamic Coins and Trade in the Medieval World* (Aldershot: Variorum) 199–230.

the earthquake of 749, which hit Palestine, reflect the state of monetary circulation at the time of their burial and bear testimony to the widespread use of the dirham in local transactions at the beginning of the eighth century. Two hoards of dirhams and a hoard of assorted dirhams and fulūs were discovered in Baysān in 1987–9 by Gideon Foerster and Yoram Tsafrir.[38] One of these hoards was discovered in a late Roman shop in the so-called- 'Valley Street', which was reoccupied after the Muslim conquests. The other two were dug up in shops that were set up at the time of the Umayyads and located along Sylvanus Street. The hoards consisted of between fourteen and 104 dirhams, struck between 700 and 747. The hoarded coins were worn out, of poor quality, and probably circulated for a long time before they were collected and stored. Those hoards show evidence of the true integration of the Islamic dirham in the local economy.

Hoards of dirhams, buried at the beginning of the eighth century before 740 in a similar archaeological context, were dug up in Jarash and in Pella. In Jarash, the University of Yale discovered a hoard of 150 dirhams in 1930–4 (although the discovery was not published) in a shop of the southern decumanus, east of the tetrakionia.[39] Similarly, in Pella, a hoard of eleven dirhams that had been issued in 730 in the Levant (Damascus), Iraq (Wāsiṭ), and as far as Iran (Abrashahr) and Central Asia (Merv), mixed with a dīnār and a few fulūs, was excavated in a stall next to the church.[40] These hoards, which were merchants' takings, confirm that the dirham became the standard unit of reference for local exchange, eclipsing the old currencies such as drachms or Arab-Sasanian dirhams. They also illustrate that the use of dirhams for daily transactions spread throughout the caliphate in the eighth century. Far from the heterogeneity that had prevailed in late antique coinage in the Near East, the production of the coin as a stable compound and single point of reference most likely favoured regional economic contact in the early Islamic Middle Ages.

Evidence of the widespread use of the silver dirham in local transactions is also to be gleaned from inscriptions dating back to the end of the eighth century or even to the beginning of the ninth century. They were found on small marble slabs discovered in Jarash in 1931 by Yale University and the American School of Oriental Research, and in 2007 by the University of Copenhagen (figs. 6.1 and 6.2). The slabs were dug up in shops located around the southern tetrakionia and along the cardo attached to the Umayyad congregational mosque presumably built under the rule of Caliph Hishām

[38] AMITAI-PREISS, N. (2000–2) 'Umayyad Coin Hoards From the Beth Shean Excavations of the Hebrew University', *INJ* 14: 224–38.

[39] This large mid-eighth-century earthquake hoard is unpublished. Otherwise, shops at Jarash have also produced a small hoard of eighth dirhams found in a ceramic juglet. See NAGHAWAY, A. (2002) 'Umayyad dirhams from Jarash (Arabic)', *ADAJ* 46: 127–33.

[40] SMITH, R. H. (1989) *Pella of the Decapolis* 2 (Winona Lake: Eisenbrauns) 64, 68–9.

b. ʿAbd al-Malik. They were stored in the private rooms of those shops, which were dedicated to the storage of goods. The slabs were reused shards of marble veneer from ancient monuments with a polished side engraved with writings and a rough back. On this surface, inscriptions were written in ink or burnt wood, in a cursive hand similar to *nasẖī*, and using an informal register.

These slabs[41] were registers of accounts, which were not legally binding. The absence of a date, signed testimonies, or 'guarantees' taken by the creditor confirms that they had no legal value. They were used by merchants to record credit or debit transactions. The inscriptions included the *basmala*, together with the customers' names and the debts they had incurred, always preceded by the locution '*qibala*' (from/to) or by the verb '*šāraṭa*' (pledge).[42] Once the debt had been paid off, the merchants erased their customers' names, as the traces of several layers of writing revealed by microscopic observation show. The sums recorded were small, which indicates that the debts were incurred to buy staple products (wheat, bread, vegetables, or condiments). The fact that they were written in dirhams, quarter dirhams, or third dirhams—perhaps paid in bronze fulūs—confirms that, for small transactions and calculating credit, silver coins were indeed preferred in the early days of Islam and that the dirham was used as the unit of accounts.[43]

ʿAbd al-Malik's reform and the 'fusion of separate currency systems into a monetary whole'[44] had deep economic impact. Internationally, it lent substantial impetus to the development of the caliphate's global commerce—in silver dirhams with Western Christendom as well as in gold dīnārs with China. Domestically, it led to an increased volume of transactions by eliminating exchange-rate fluctuations, and in consequence an increased velocity of money.

3. BALANCING SUPPLY AND DEMAND

In the late seventh and early eighth centuries, there was no pressing need for metal, as the existing stocks of currencies inherited from the Byzantines and

[41] BESSARD, F. (2008) 'Arabic Shopkeepers' Accounts from Islamic Jarash', *ADAJ* 52: 122–6. A similar ostracon was found in Evrona and deciphered by M. Sharon of the Hebrew University. It contains a similar list of names and sums of dirhams. AVNER, U., MAGNESS, J. (1998) 39–57.

[42] HOENERBACH, W. (1961) 'Some Notes on the Legal Language of Christian and Islamic Deeds', *JAOS* 81: 34–8.

[43] WALMSLEY, A. (2012) 'Regional Exchange and the Role of the Shop in Byzantine and Early Islamic Syria-Palestine: An Archaeological View', in C. Morrisson (ed.) *Trade and Markets in Byzantium* (Washington DC: Dumbarton Oaks) 311–30.

[44] HECK, G. (2004) *An Early Business History: an Inquiry into how Muslim trade practice and business practices evolved in the Dar al-Islam* (Riyadh: King Faisal Center for Research and Islamic Studies) 94.

Sasanians[45] were sufficient to support the volume of exchange (additional money supply may have encouraged cash hoarding, in turn causing a decline in money velocity). However, from the late eighth and ninth centuries, the development of the banking system and entrepreneurial activities in cities as well as countrysides necessitated more money to support the fast-growing economy. Caliphs, governors, and later local emirs dehoarded the gold reserves accumulated in the Christian churches of Ǧazīra and Egypt, as well as increased their control over fresh metal supplies in Africa, Central Asia, Iran, and Arabia. After having relied predominantly on the existing stock, these imperial and local initiatives supported the flowering of mints, as well as supplying existing manufactories of coins in the Middle East and Central Asia, which contributed to sustaining the ninth-century economic development.

The clergy, which was exempt from taxes under the Sufyānids' rule, became increasingly liable from the reign of ʿAbd al-Malik b. Marwān from the late seventh century onwards. The textual testimonies we possess indicate that churches and monasteries had to draw on their gold and precious furniture to pay their taxes,[46] especially since, according to Jacob of Edessa, 'Caliph ʿUmar II forbade in 717 all monetary donations to churches.'[47] Thus, the chronicle of Zuqnīn mentions that, in 754, the gold and sacred ornaments of the churches and monasteries of Ǧazīra were registered and seized by Caliph al-Manṣūr as part of the payment of their fiscal dues.[48] Similarly, some years later in Egypt, in the ninth century, Patriarch Michael II (881–99) gave away gold reserves belonging to the Church of Alexandria and was forced to sell the herds of camels that belonged to the monks of the Monastery of St Macarius.[49] This gold was highly beneficial for the Empire and this process of dehoarding the church treasures through taxes was used to supply the minting of dīnārs that developed in Damascus from 693 and later in Baghdad from 762.[50]

Alongside releasing back into circulation the gold and silver resources hoarded over the years in the churches and Iraqi Sasanian palaces, mining activities experienced an exceptional increase, which reached their zenith in

[45] Under the rule of Caliph ʿUmar b. al-Ḫaṭṭāb (634–44) and his successors, the Muslims captured large amounts of gold and silver from the Sasanian royal treasuries as a corollary of the conquests of al-Madāʾin, Ǧalūlā, and Tikrīt in Iraq, as well as Nihāwand in the Ǧibāl. See AL-ṬABARĪ [1879–1901] (1964) *Taʾrīḫ al-rusul wa al-mulūk*, Prima Series (Leiden: De Goeje) 2436, 2451, 2453, 2457, 2465.

[46] EBIED, R. Y., YOUNG, M. J. L. (1973) 'Extracts in Arabic from a Chronicle Erroneously Attributed to Jacob of Edessa', *Orientalia Lovaniensia Periodica* 4: 195.

[47] EBIED, R. Y., YOUNG, M. J. L. (1973) 195.

[48] HARRAK, A. (1999) *The Chronicle of Zuqnīn* (Toronto: Pontifical Institute) 228–9.

[49] ABŪ ṢĀLIH (1895) *Churches and Monasteries of Egypt and Some Neighbouring Countries* (Oxford: Evetts) 136.

[50] AL-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 469.

the ninth century.[51] The control of the Near Eastern, Central Asian, and African mines, and the increased exploitation of their resources, combined with the reuse of abandoned deposits, occurred simultaneously with the forced migration of communities into burgeoning camps around the locality of the mines. The multiplication of metal ore extraction sites also meant that metal production became too extensive for imperial power to directly control, and it thus became a private affair. New technologies were developed in both the imperial and private sectors in order to increase yield and meet a demand, which, since the Muslim conquests, had been ever growing.

There was first an influx of gold from East and West sub-Saharan Africa. In the middle of the seventh century, the Muslims seized the gold mines of Nubia, East Lower Nubia (known as *bilād al-maʿdin* or 'land of the mines' to the Arab geographers[52]), and Ethiopia in East Africa[53] in 651 by defeating the Beja. They controlled the access to the gold deposits of Buwaib, Baiḍīya, Bayt Ibn Ziyād, ʿU̱daifir, Ǧabal Aḥmar, Ǧabal Bayād, Qaṣr Ibn Maʿūd, Wādī ʿAllākī (south-east of Aswan), Sanṭa, Rifq, and Saẖtīt.[54] In the second half of the seventh century, the gold mines of West sub-Saharan Africa (known as *bilād al-sudān* in the Classical Arabic literature)—for instance, the gold fields of Ġana in the west of Nigeria—also fell under the control of the Muslims between 664 and 681, when General ʿUqba b. Nafī defeated the Berbers, who, in the Maghreb, controlled the Saharan tracks. Nevertheless, historians and geographers report that the exploitation of East and West sub-Saharan African mines and wadi alluviums reached its apex later from the ʿAbbāsids in the ninth and up to the tenth and eleventh centuries,[55] although, in East Africa, it slowed down under the reign of Caliph al-Mutawakkil (847–61), when the Beja rebelled against the Muslim authority in 855.[56] The metal travelled to the port of ʿAyḏāb along the Red Sea and was then shipped to the Levant to be melted down in Baghdad.[57]

In Arabia, there was also a dramatic expansion of gold and silver mining in the eighth and ninth centuries.[58] In the Ḥiǧāz, surveys and excavations carried out in the 1980s[59] have revealed evidence of exploitation of the gold deposits of

[51] D. M. DUNLOP (1957) 'Sources of Gold and Silver in Islam according to al-Hamdani', *Studia Islamica* 8: 29–49.

[52] HOLT, P. M., DALY, M. W. (1988) *A History of the Sudan: From the Coming of Islam to the Present Day* (New York: Longman) 16; INSOLL, T. (1999) *The Archaeology of Islam in Sub-Saharan Africa* (Oxford: Blackwell) 103.

[53] IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: De Goeje) 50–1.

[54] IBN ḤAWQAL (1939) 50–1.

[55] AL-HAMḎĀNĪ (1885) *Kitāb al-buldān* (Leiden: De Goeje) 87.

[56] AL-ṬABARĪ [1879–1901] (1964) Tertia Series: 1429.

[57] IBN ḤAWQAL (1939) 42.

[58] HECK, W. G. (1999) 'Gold Mining in Arabia and the Rise of the Islamic State', *JESHO* 42: 364–95.

[59] De JESUS et al. (1982) 'Preliminary report of the ancient mining survey, 1981', *Atlal* 6: 63–79; (1983) 'Preliminary report on the mining survey, north-west Hijaz, 1982', *Atlal* 7: 76–83;

Maʿdin al-Nuqra, Mawān,[60] and ʿAšam[61] under the early ʿAbbāsids. In the Naǧd, the ʿAbbāsids extracted gold from the mine of al-ʿAqīq,[62] where archaeologists have found artefacts dating from the ninth century.[63] In parallel, the rich silver deposits of the Yemen were brought to use, in particular at the mine of al-Raḍrāḍ (al-Jabalī). This is mentioned by the tenth-century geographer al-Ḥasan b. Aḥmad al-Hamdānī[64] and archaeologically attested. Several excavation campaigns have led to the detailed exploration of the camp where the minerals were treated. They have provided evidence that the exploitation of al-Raḍrāḍ's deposits began during the pre-Islamic period and intensified under the Umayyads and early ʿAbbāsids, when the four hundred furnaces discovered were presumably operational, smelting vast quantities of ores. The metal was then dispatched to Iraq, Persia, Syria, and Egypt. Al-Hamdānī writes that the miners were Persians. They migrated to the region during the Jahiliyya and then settled there under the Umayyad and ʿAbbāsid dynasties. However, by the end of the ninth century, the mine was no longer in use. Al-Hamdānī mentions that the silver mine of al-Raḍrāḍ fell into ruins from 883, following tribal conflicts and the murder of Muhammad b. Yaʿfūr, governor of Ṣanʿā, events that provoked the emigration of miners.[65]

The Arabian silver production was augmented through the capture and exploitation of the late antique silver mines of Iran[66] and Central Asia,[67] of

HESTER, J. et al. (1984) 'Preliminary on the third phase of ancient mining survey, south-western province, 1983', *Atlal* 8: 115–42; ZARINS, Z. et al. (1981) 'The second preliminary report on the south-western province', *Atlal* 5: 9–42.

[60] AL-YĀQŪT (1957) *Muʿǧam al-buldān* 3 (Beirut: Dār Sādir) 349.

[61] AL-ḤASAN B. AḤMAD AL-HAMDĀNĪ (2003) *Kitāb al-ǧawharatayn al-ʿatīqatayn al-mā'iʿatayn min al-ṣafrā' wa al-bayḍā'* (Ṣanʿā) 120.

[62] AL-SAMHŪDĪ (1984) *Wafā' al-wafā' bī-aḫbār dār al-muṣṭafā* 4 [Cairo 1955] (Beirut) 15.

[63] HESTER, J. et al. (1983) 115–42.

[64] AL-ḤASAN B. AḤMAD AL-HAMDĀNĪ (2003) 123; BENOIT, P. (2003) 'Recherches sur la mine d'al-Jabalī ', *Chroniques yéménites* 11: 50.

[65] AL-ḤASAN B. AḤMAD AL-HAMDĀNĪ (2003) 123; CHRISTMANN, P. et al. (1983) 'Résultats de trois années de prospection en République arabe du Yémen. Découverte du gisement de Jabali (Zn-Pb-Ag) dans la couverture jurassique', *Chronique de la recherche minière* 473: 25–38; ROBIN, C. (1987) 'The mine of ar-Raḍrāḍ: al-Hamdānī and the silver of the Yemen', in W. Daum (ed.), *Yemen: 3000 years of Art and Civilization in Arabia Felix* (Innsbruck: Umschau) 123–4; BENOIT, P. et al. (2003) 47–66; PELI, A. (2006) 'Les mines de la péninsule Arabique d'après les auteurs arabes (VIIe–XIIe siècles)', *Chroniques yéménites* 13: 1–22.

[66] Ibn Ḥawqal mentions in particular the silver mines of Ḫurāsān in the mountains of Gūr. IBN ḤAWQAL (1939) 434, 445.

[67] Ibn Ḥawqal reports the exploitation of the Central Asian silver mines in the region of Farġāna as well as around the Mount al-Buttam. IBN ḤAWQAL (1939) 445, 505. In the region of Ilāq, near Farġāna, silver and golden deposits were exploited in the tenth century and coins were struck in local mints attached to the mines. IBN ḤAWQAL (1939) 509–10. The geographer also mentions the use of the Waḫḫan silver and golden deposits of Transoxiana during the early ʿAbbāsid period. IBN ḤAWQAL, (1939) 476.

maʿdin Šāš in Farġāna and maʿdin Banǧhīr[68] near Kābul,[69] as mentioned in the tenth-century chronicle of Agapius of Manbiǧ. The chronicler reports on the living and working patterns of local communities, and mentions that the mass of Persian workers employed to extract silver from the Ḫurāsāni mines increased to 30,000 under the reign of al-Manṣūr (754–75).[70] A portion of the metal extracted was sent to the mints that developed in the most prominent urban centres of the Near East after the conquests. The rest was melted locally, as evidenced by the discovery of dirhams struck in the name of Hārūn al-Rašīd in 805 and bearing the mark of the mint of Maʿdin Šāš in Farġāna. In addition, the exploitation of the silver mines located in the Caucasus and Armenia, between Tiflis and Yerevan, near Sper, was intensified during the reign of al-Mahdī (775–85), according to the eighth-century historian Ghewond.[71]

The mining of copper was revived in central and western Arabia, as well as in the Negev[72] (Nahal Amram,[73] Tsfunot, Rehavam,[74] Wadi Tweiba, and Jebel Merah).[75] The mines in the southern Negev dated from the Nabataeans and had been abandoned in the late Roman period. Yet, the prospections and excavations carried out by Jodi Magness and Uzi Avner in the 1990s have shown that they experienced the most intensive activity in early Islam, with the digging of additional galleries and vertical shafts. The mines of Nahal Amram were particularly large and are the only ones published in detail.[76]

[68] DEKÓWNA, M. (1971) 'L'état des recherches sur l'exploitation des mines d'argent et sur la crise de l'argent en Asie centrale', *Archeologia Polski* 16: 483–502. IBN ḤAWQAL (1939) 441, 449. In the ninth and tenth centuries, the populations of Banǧhīr and Ǧārbāya were entirely devoted to the exploitation of the mines, as Ibn Ḥawqal explains that they did not possess any orchards or cultivated fields. In early Islam, the mines of Banǧhīr and Ǧārbāya were thus intensively exploited, whereas the late antique mine of Kūh was abandoned because of a lack of sufficient wood for the furnaces.

[69] IBN ḤAWQAL (1939) 450. Ibn Ḥawqal mentions the presence of iron mines near Kābul.

[70] AGAPIUS DE MANBIǦ (1912) *Chronique*, trans. A. Vasiliev, coll. Patrologia Orientalis 8: 544–5.

[71] GHEVOND (1856) *Histoire des guerres et des conquêtes des Arabes en Arménie*, trans. Chahnazarian (Paris: Imprimerie Meyrueis et Co.) 149.

[72] On copper industry in the Negev, see the recent publication of NOL, N. (2015) 'The Fertile Desert: Agriculture and Copper Industry in early Islamic Arava (Arabah)', *Palestine Exploration Quarterly* 147/1: 49–68.

[73] WILLIES, L. (1990) 'Exploring the Ancient Copper Mines of the Wadi Amram (South Arabah)', *Institute for Archaeo-Metallurgical Studies* 15–16: 12–15.

[74] AVNER, U., MAGNESS, J. (1998) 'Early Islamic Settlement in the Southern Negev', *BASOR* 310: 39–57.

[75] FRANK, F. (1934) 'Aus der 'Araba. I. Reiseberichte', *Zeitschrift des Deutschen Palästina-Vereins* 57: 247–8.

[76] The mines of Tsfunot, Rehavam, Wadi Tweiba, and Jebel Merah have been explored. However, the results have not been published and are briefly mentioned in B. Rothenberg's survey of Eilat. ROTHENBERG, B. (1967) *Archaeological sites in Eilot District* (Eilot: Z. Ron); ROTHENBERG, B. (ed.) 1990 *The Ancient Metallurgy of Copper: Researches in the Arabah, 1959–1984* 2 (London: Institute for Archaeo-Metallurgical Studies).

Besides, six smelting camps at the outskirts of the mines, at Taba, Tweiba, Merah, Wadi ʻAraba-Kibbutz Eilot, Nahal Shehoret, and Beer Ora also developed from the eighth century, as indicated by the ceramics, essentially Mahesh ware, dated by Donald Whitcomb to between 750 and 800, as well as carbon-14 evidence.

Important changes in technology are associated with the new mining. 'Early Islamic mining is distinguished by a more extensive use of sloping and horizontal adits, shafts with galleries, mercury amalgamation to extract gold from crushed quartz, cupellation to extract silver from lead ores and to separate gold from copper, and cementation to separate gold from silver, as well as the use of bellows inserted into ceramic tubes built into the furnace wall to maximize the heat'. As compared with late antiquity, there was also more involvement by independent prospectors and merchants in mining during the early Islamic era. 'Mining was a private activity under public authority. Investment and exploitation by private miners, merchants, and government agents were usually mixed at particular mines, and the government normally took a share of the production'.[77] Both individual local miners and merchants were active in the silver mines at Banǧhir[78] in Central Asia and at the gold mines at Wādī ʻAllākī in Africa.[79] In Oman, owners of copper mines leased them to tenants for 10 per cent of the profit. In Yemen, the agents of the ruler and private miners jointly exploited the silver deposits of al-Raḍrāḍ. In the Ḥiǧāz, the financing of early medieval mining operations was based on a corporate system, such as the banū Sulaym gold mine and the mine of al-ʻAqīq that was owned collectively by the banū Lihb. These mines were consigned to private interests in exchange for advance payment of the Zakāt. The abundance of literary testimonies of privately-owned mines in the medieval Near East and Central Asia reinforces the picture that precious metal production was a key private and imperial activity.[80] The labour force in early Islamic mining was relatively free and mobile. There are no references to slave labour until the ninth century at Wādī ʻAllākī and in Central Arabia.

Through the establishment of a single reference system, which eradicated the complexity that had prevailed in relation to the value of the coins that were in use until then, and by striking lighter silver coins, ʻAbd al-Malik's reforms therefore allowed exchange mechanisms to become more fluid and contributed to the development of a vast single market within a unified political space, without fiscal impediments to trade in the form of customs

[77] MORONY, M. (2006) 'Mining', in J. Meri (ed.) Medieval Islamic Civilization (Routledge) 504–505. WEISGERBER, G. (1980) 'Patterns of Early Islamic Mining', *Seminar for Arabian Studies* 10: 115–26.

[78] LOWICK, N. (1988) 'Silver from the Panjhir Mines', *Metallurgy in Numismatics* 2: 65–74.

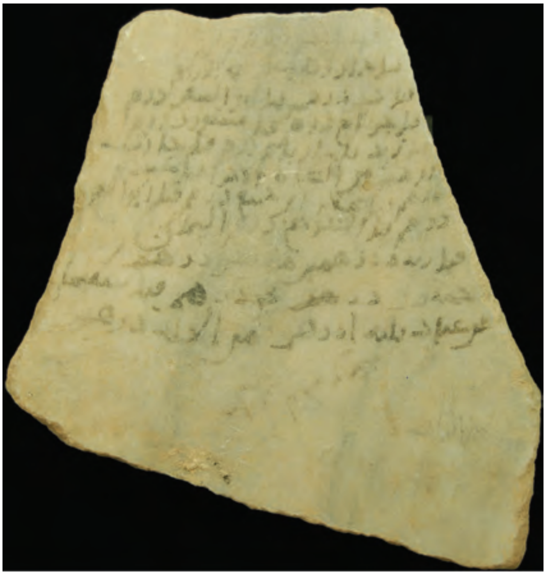
[79] AL-YAʻQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 334–5.

[80] IBN ḤAǦAR AL-ʻASQALĀNĪ (1910) *Kitāb al-Iṣābat fī tamyīz al-Ṣaḥābat* 4 (Cairo: Maṭbaʻat al-Saʻādat) 196.

dues. While certainly symptomatic of the restructured political-economic order, they played a role in triggering exchange and increasing the velocity of money circulation. Subsequently, in the late eighth, ninth, and tenth centuries, influxes of precious metal from the release of antique treasuries, the intensified exploitation of existing mines, and the discovery of ore veins and deposits in the Near East, Central Asia, and West Africa played an important part in sustaining and developing a culture of consumption.



Fig. 6.1 Jarash: An early medieval shop of Jarash *sūq*. (© F. Bessard)



بسم الله الرحمن الرحيم
قبل حمّاد وقبل (؟) سبع الدراهم
قبل حميد درهمين قبل أبو الصقر درهم
قبل جرّاح درهم قبل مستورد درهم
قبل زيد ثلاثة أرباع درهم قبل حارث
درهمين من الشاه درهم وقبل (؟)
درهم قبل علا وإبن جيمع درهم قبل أبو العيز
درهم قبل المستودع درهم اليماني
قبل رندة درهمين (؟) درهم
حمدون درهم كر درهم قبل سليمان
أم عبّاد ثلاثة الدراهم من (؟) درهم

In the name of God, the merciful, the compassionate
(I have) with Hammād and with (?) seven darāhim
with Humayd dirhamayn, with Abū al-Ṣaqr one dirham
with Jarrāḥ one dirham, with Mustawrid one dirham
with Zayd three quarters of a dirham, with Hāriṯ
dirhamayn, (I received) from al-Shāh one dirham and (I have) with (?)
one dirham, with ʿAlā and Ibn Jaymaʿ one dirham, with Abū al-ʿĪz
one dirham, with al-Mustawdiʿ one dirham, al-Yamānī …
with Randa dirhamayn (?) one dirham
Hamdūn one dirham plus another dirham, (I have) with Sulaymān…
Umm ʿAbbād three darāhim, (I received) from (?) one dirham

Fig. 6.2 Jarash: Shopkeeper's account written in Arabic on a piece of marble slab found in the early medieval shops of Jarash *sūq*. (Courtesy of Alan Walmsley, Islamic Jarash Project 2006–8)

7

Islamifying the Economy

In the seventh and early eighth centuries, the Arab conquests did nothing to disrupt the influence of Christian and Jewish law, bishops and rabbinic leaders[1] on urban economic affairs in the Near East. Since the fifth century, the church in Egypt[2] and the Levant played a prominent role in the administration and regulation of trade and production, because of the trust placed in its judiciousness. Weights and measures were safely preserved in churches,[3] according to the historical and material records. The fifth-century historian Sozomenus indicates that the Cathedral of Alexandria in Egypt was the depository of official weights and measures since the reign of Constantine I (306–337).[4] Interestingly, excavations in the late antique church of Kom Ombo in the Thebaid in Egypt in 1904 have also led to the discovery of a box for different weights and a small scale. The box cover was ornamented with a carved cross, a reminder that it was one of the duties of a bishop to check the weights and approve them for use.[5] From the fifth century, bishops participated in the election of state officials; chosen among clerics and rabbinic leaders, these officials were in charge of controlling market prices and

[1] COHN, Y. B. (2011) 'The Graeco-Roman Trade Fair and the Rabbis', *JAOS* 131(2): 187–93. Christian and Jewish attitudes and prohibition of periodic markets associated with pagan cults remained, for instance, widely applied up to the late seventh century.

[2] HOLLERICH, M. J. (1982) 'The Alexandrian Bishops and the Grain Trade: Ecclesiastical Commerce in Late Roman Egypt', *JESHO* 25/2: 187–207. See the prominent influence of bishops on grain trade and the movement of goods in late antique Egypt.

[3] MORRISSON, C. (2012) 'Weighing, Measuring, Paying. Exchanges in the Market and the Marketplace', in C. Morrisson (ed.) *Trade and Markets in Byzantium* (Washington DC: Dumbarton Oaks) 383–6; DURLAT, J. (1982) 'Les attributions civiles des évêques byzantins: L'exemple du diocèse d'Afrique', in *XVI. Internationaler Byzantinistenkongress, Wien, 4.-9. 1981: Akten, vol. 2.2, JÖB 32.2* (Vienna) 73–84; CARRIÉ, J. M. (1994) 'Les échanges commerciaux de l'État antique tardif', in J. Andreau, P. Briant, R. Descat (eds.) *Les échanges dans l'Antiquité: le rôle de l'Etat* (Saint-Bertrand-de-Comminges: Musée Archéologique Départemental) 175–211.

[4] SOZOMEN (2004) 5.3.3, *Historia Ecclesiastica* 2, trans. G. S. Hansen (Brepols: Turnhout) 574.

[5] SADEK, A. (2013) 'Christianity in Kom Ombo', in G. Gabra, H. N. Takla (eds.) *Christianity and Monasticism in Aswan and Nubia* (Cairo: The American University of Cairo Press) 254; RUTSCHOWSCAYA, M.H. (1979) 'Boîtes à poids d'époque copte', *Revue du Louvre* 29: 1–5.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard, Oxford University Press (2020).
DOI: 10.1093/oso/9780198855828.001.0001

transactions, as well as levying taxes.[6] Their responsibility in the defence of law and economic order[7] was then facilitated by the significant influx of craftsmen and traders into ecclesiastical office.[8] From the sixth century, the involvement of the church and Christian religious elite in economic affairs was even bolstered under the rule of Justinian I after his edict of 545.[9] In the same manner, the role of religious authorities in the regulation of the urban economy was prominent in the fourth- and fifth-century Sasanian world. The monitoring of transactions and the control of prices, weights, and measures was provided by rabbis and Christian priests,[10] who had legal competence and knowledge of Sasanian law.[11]

Until the late seventh century, there is a definite continuity in the system of regulation and administration of urban economic life. By contrast, from the early eighth and ninth centuries, the evolving status of trade and craft in Near Eastern cities and the conscious Islamification of daily life encouraged changes to the established practices. How were the moral prerogatives of Islam applied to the late antique Christian and Jewish economic institutions and systems of paying, weighing, and regulating finances? What remained from the pre-existing regime of regulation and what was Islamized? Did this process hinder or trigger urban crafts and the circulation of commodities? This chapter discusses the mechanisms by which Islamic religious norms came to govern general economic behaviour. It looks at the increasing influence of Islamic worship, religious institutions, and authority in the regulation and administration of trade, retail, and crafts from 700 to 950, in the context of the Islamification of daily life, and its economic significance.

1. COMMERCIAL RITUALS AND ISLAMIC WORSHIP

The implementation of Islamic principles in the inner working of the urban economy began with the alignment of commercial rituals with Islamic

[6] LANIADO, A. (2002) *Recherches sur les notables municipaux dans l'Empire protobyzantin* (Paris: Association des Amis du Centre d'Histoire et Civilisation de Byzance) 173.

[7] Isaac Fikhman indicates that the administrative role of late Roman guilds in economic affairs declined in the context of the empowerment of Christian religious leaders. FIKHMAN, I. F. (1994) 'Sur quelques aspects socio-économiques de l'activité des corporations professionelles de l'Égypte byzantine', *Zeitschrift für Papyrologie und Epigraphik*, Bd. 103: 35, 39.

[8] RAPP, C. (2005) *Holy Bishops in Late Antiquity: The Nature of Christian Leadership in an Age of Transition* (Berkeley: University of California Press) 176.

[9] The Edict of Justinian I confirmed the role of the church as guarantor of official weights and measures. MORRISSON, C. (2012) 385.

[10] DARYAEE, T. (2013) *Sasanian Persia: The Rise and Fall of an Empire* (London: I.B. Tauris) 142–4.

[11] MORONY, M. (2012) 'Religious Communities in the Early Islamic World', in W. Pohl, C. Gantner, R. Payne (eds.) *Visions of Community in the Post-Roman World: The West, Byzantium and the Islamic World, 300–1100* (Burlington: Ashgate) 155–63.

worship. Fairs and market days were planned to coincide with Muslim celebrations and Friday prayers. The urban and regional chronicles, which offer a detailed picture of living conditions in the cities and countryside of the *mašreq* from the eighth to tenth centuries, provide evidence of a process of institutionalizing Friday markets, along with the construction of mosques in large towns and villages, and their positive impact on local economic activities.

Describing the neighbourhood of Buẖāra in medieval Sogdia, al-Naršaẖī reveals that Fridays became days of worship and buoyant affairs in the city Zandana in the ninth and tenth centuries. The source remarks on the *zandanījī* fabrics[12] woven and originally purchased locally, whose production significantly increased in the Middle Ages and whose commercialization extended towards Iraq, Fārs, and Kirman. Al-Naršaẖī ties together the evolution of the *zandanījī* market, from local to regional, with the institutionalization of the Friday market. With the bulk of villagers and travellers gathering there after morning prayer, this cotton cloth originally sold to locals became a desirable commodity.[13] In small villages that had limited infrastructures of trade, the construction of a congregational mosque[14] and the implementation of a market day on Fridays had a significant social and economic impact. The existence of a principal mosque and judicial authority (*qāḍī*) encouraged the Islamization of the dominantly Christian, Jewish, and Zoroastrian populations, while the setting up of a market day on Fridays triggered the economy of these small settlements. This finds an illustration in the ninth-century description from al-Naršaẖī of the Sogdian village of Shargh in the province of Buẖāra. The village, which was not provided with a grand mosque before the late ninth century and whose economy mostly relied since late antiquity on its fishing, agriculture, and an annual fair, gained in prosperity after the institutionalization of a Friday market. This weekly market became an opportunity for the locals to engage more extensively in craft and sell their brass and cotton cloth to the merchants of Buẖāra and the regional towns.[15] Al-Naršaẖī does not explicitly state whether the local pre-Islamic annual fair was consequently abandoned or Islamized, as happened in Buẖāra. Buẖāra hosted an annual fair, where Buddhist figurines were sold around the fire temple before the Arab conquests of Central Asia. Yet, when the Muslims

[12] A few fragments of *zandanījīs* dating from late antiquity to the eighth century have been identified. A medieval example is currently at the Musée Historique de Lorraine, Nancy. See SHEPHERD, D. G., HENNING, W. B. (1959) 'Zandaniji Identified?', in *Aus der Welt der islamischen Kunst* (Berlin) 15–40.

[13] AL-NARŠAẖĪ (2007) *The History of Bukhara*, trans. R. N. Frye (Princeton: Wiener) 16.

[14] The existence of a mosque and judicial authority also belonged to the criteria, which distinguished in the Middle Ages a city or town (*madīna*) from a village (*qaryab*). LASSNER, J. (1967) 'Municipal Entities and Mosques: An Additional Note on the Imperial Center', *JESHO* 10(1): 53–63.

[15] AL-NARŠAẖĪ (2007) 16.

seized power, the temple was converted into a mosque to perpetuate and legitimize the fair.[16]

The Islamization of Christian, Zoroastrian, and pagan fairs from the eighth century[17] resulted directly from this alignment of Islamic worship and commercial rituals during the late Umayyads and early ʿAbbāsids. As seasonal fairs were popular commercial manifestations well established before the rise of Islam, the astro-agricultural calendars of Ibn Māsawayh,[18] Ibn Bahlūl,[19] and al-Bīrūnī,[20] dating from the ninth to the eleventh century, reveal that they were generally perpetuated in the Levant and Iraq, as well as legitimated, by channelling piety towards a Muslim shrine. This process allowed for their continuous development, as shown by the ongoing popularity of the seasonal fairs in Ludd in Palestine, ʿAmmān in the Balqā, and Boṣra, Aḏriʿāt, Mu'ta, Damascus, sūq Tūmā, Salamiyā, Aleppo, and al-Ruṣāfa in Syria from late antiquity to the ʿAbbāsid era.

As André Binggeli argues, the fairs associated with prophetic worship of the Old Testament, renowned in the Islamic traditions, were more rapidly assimilated and Islamized. The fair of Dayr Ayyūb, near Deraa in southern Syria, dedicated to the worship of Job,[21] attracted Muslim pilgrims from the ninth century, as mentioned by al-Ṭabarī.[22] Muslim pilgrims would rush to the fountain of Job, as its waters were reputable for miraculously healing the sick, before worshipping the patriarchal tomb. According to Belʿamī's account in the tenth century, al-Ṭabarī had visited the site. With the regular peregrinations of the Muslims to the shrine of Job and the successful perpetuation of the fair, a mosque was erected in the tenth century.[23] The fair of Diospolis/Ludd in Palestine, associated with the worship of St George, was also undoubtedly quickly Islamized, as the icon of the saint was integrated into certain traditions dedicated to the Islamic prophet Ḫaḍir. The fair was authorized and Muslims attended it from the eighth century, as indicated by literary evidence, such as the story of poet al-Muʿallā's pilgrimage to Mecca and Jerusalem under the caliphate

[16] WHEATLEY, P. (2001) *The Places Where Men Pray Together. Cities in Islamic Lands Seventh Through Tenth Centuries* (Chicago: University of Chicago Press) 243.

[17] A. Binggeli has published a couple of detailed studies on the Islamization of Christian fairs in the first centuries of Islam. See BINGGELI, A. (2006–7) 'Foires et pèlerinages sur la route du Hajj', *ARAM* 18–19: 559–83; (2012) 'Annual Fairs, Regional Networks, and Trade Routes in Syria, Sixth-Tenth Centuries', in C. Morrisson (ed.) *Trade and Markets in Byzantium* (Washington DC: Dumbarton Oaks) 281–96.

[18] SBATH, P. (1933) 'Kitāb al-Azmina', *Bulletin de l'Institut d'Égypte* 15: 235–57.

[19] IBN BAHLŪL (1985) *Kitāb al-dalā'il* (Frankfurt: Publication of the Institute for the History of Arabic and Islamic Science).

[20] AL-BĪRŪNĪ (1923) *Al-Āṯār al-bāqiyya ʿan al-qurūn al-ḫāliyya* (Leipzig: Sachau).

[21] IBN BAHLŪL (1985) 142.

[22] BELʿAMĪ (1867) *Tārīḫ Belʿamī* 1, trans. Zotenberg (Paris) 263–64.

[23] AL-MASʿŪDĪ (1965–6) *Murūǧ al-ḏahab* 1 (Beirut: C. Pellat) 38.

of al-Mahdī (775–86). On the way to Arabia, he journeyed to the fair in Ludd in honour of St George.[24]

Moreover, Muslims perpetuated and Islamized the late antique fairs held in towns, where the Prophet Muḥammad and his travelling companions journeyed. This is the case with the fair in Boṣra.[25] The town was, in effect, linked to the passage of Muḥammad, who, according to the Islamic tradition, met the monk Baḥīrā there, who predicted an exceptional destiny. Boṣra was also the first major late Roman town to be captured by the Arab armies in 635, and one of the six copies of the Qur'ān, sent by Caliph 'Uṯmān b. 'Affān (644–56) through the provinces of the caliphate, would pass through the city before arriving in Damascus. For this reason, the town was venerated by Muslims from the seventh century. The local seasonal trade fair, organized in late antiquity every July in honour of St Cirycus and his mother Julitta (martyred in Tarsus in the province of Cilicia during the reign of Diocletian),[26] was consequently Islamized from the eighth century and associated with the commemoration of the meeting of the Prophet and Baḥīrā. To honour the site where Muḥammad's camel knelt, the Mosque al-Mabrak was constructed on the ancient Christian shrine dedicated to St Ciryce, on the outskirts of the town, on the supposed fair grounds. Inscriptions found in the remains of the mosque date its foundation to the caliphate of Yazīd b. 'Abd al-Malik in 720–4 with further extension and refurbishments under the rule of Marwān II between 744 and 750.[27]

Similarly, the pagan fair of Mu'ta, located south of Kerak in Jordan, held every November, was perpetuated and Islamized between the late eighth and early ninth centuries, to honour the death of the Prophet's companions, Ǧa'far ibn Abī Ṭālib, Zayd Ibn Ḥāriṯa, and 'Abd allāh ibn Rawāḥa. In Mu'ta, these generals, sent by Muḥammad to Syria to confront the Roman army after the death of a Muslim emissary, reportedly perished in September 629, and the town was consequently venerated by the Islamic community from the seventh century. The news of the generals' deaths is recounted by al-Ya'qūbī,[28] and archaeological finds confirm that their tombs were transported to a shrine 3km from Mu'ta at the end of the eighth century or in the first half of the ninth century. In the generals' shrine, an epitaph in Kufic script was

[24] IBN ḪURRADĀḎBIH (1967) *Kitāb al-Masālik wa'l-mamālik* (Leiden: Brill) 79.

[25] SBATH, P. (1933) 253; IBN BAHLŪL (1985) 168.

[26] SARTRE-FAUTRIAT, A. (2000) 'Georges, Serge, Élie et quelques autres saints connus et inédits de la province d'Arabie', in *Romanité et cité chrétienne. Permanences et mutations, intégration et exclusion du Ier au VIe siècle. Mélanges en l'honneur d'Yvette Duval* (Paris: DeBoccart) 295–314.

[27] KORN, L. (2007) 'La mosquée d'Omar (al-Jāmi' al-'Umarī, Grande mosquée, mosquée du Vendredi)', in J. Dentzer-Feydy et al. (eds.) *Boṣra aux portes de l'Arabie* (Beirut: Ifpo) 283–6.

[28] AL-YA'QŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 326.

discovered and dated, using palaeographical evidence, to the eighth and ninth centuries.[29] The construction of the shrine honouring the bravery of the generals Ǧa'far ibn Abī Ṭālib, Zayd Ibn Ḥāriṯa, and 'Abdallāh ibn Rawāḥa on the battlefield arguably occurred as an attempt to politically promote the Islamization of the local pagan celebration and the accompanying regional trade fair.

This process of maintaining an ancient pagan or Christian fair, by dedicating it to a Muslim holy place, finds another confirmation in 'Ammān, where a fair was organized in late antiquity every August during the pilgrimage in honour of the martyr St Elianos. The Arab geographers mention that, in the nearby village of al-Raqīm, the cave of the Seven Sleepers or *ahl al-kahf*,[30] where the Qur'ān reports that young believers in antiquity took refuge to resist the imperial pressure to adopt paganism, was venerated at least by the tenth century.[31] The sources indicate that a commemoration of the cave occurred every August.[32] The similarity between the date of the late antique Christian fair and the date of the commemoration of the Seven Sleepers near 'Ammān in the Middle Ages suggests that there was here an attempt to Islamize the fair, by institutionalizing a Muslim celebration to compete with the Christian pilgrimage.

The perpetuation and Islamization of these fairs dating back to antiquity enabled their continued popularity in the Middle Ages in the context of the growing conversion of the population. As they were strategically located along the busiest routes, their continuity helped to promote regional trade. In southern Syria, the fairs, except for those in Ludd and Jerusalem, were positioned on the north–south axis, which linked Damascus to the Ḥiǧāz in Arabia and became the route of the Meccan pilgrimage. In northern Syria and Ǧazīra, the fairs lined the towns along the roads and waterways between Iraq, Syria, the Caucasus,[33] and Byzantium. In the steppe zones, the fair of 'Ammān was placed in an enviable position for trade with nomads. In the context of the development of road networks and infrastructures of trade towards the end of the seventh century and the beginning of the eighth, the economic role of these fairs in the Near East was strengthened further. A late-seventh-century

[29] CLERMONT-GANNEAU, C. (1900) 'Le tombeau de Dja'far', *Recueil d'archéologie orientale* 3: 278–82; COMBE, E., SAUVAGET, J., WIET, G. (1932) *Répertoire chronologique d'épigraphie arabe* 2 (Cairo) 98–9, no. 540.

[30] CLERMONT-GANNEAU, C. (1900) 'El-Kahf et la caverne des Septs Dormants', *Recueil d'archéologie orientale* 3: 293–303.

[31] AL-MUQADDASĪ (1877) 175.

[32] PELLAT, C. (1986) *Cinq calendriers égyptiens* (Cairo: Ifao) 200.

[33] Fairs in Dabil and Maragha attracted merchants from Yemen, Iraq, Ḫurāsān, Syria, and North Africa in the tenth century. The geographer Ibn Ḥawqal reveals that the fairs were already famous during the rule of Yūsuf Ibn Abī al-Sāǧ in Azerbaijan between 901 and 928. IBN ḤAWQAL (1939) 351–2. It is, however, not specified whether these fairs dated from late antiquity and were perpetuated after the rise of Islam or if they developed during the early Middle Ages.

description of the seasonal fair of Jerusalem by Adamnanus suggests that trade fairs became proper wholesale markets 'attracting [in Jerusalem's case] a multitude of almost innumerable stallholders of diverse origins who had travelled from afar to buy or sell'.[34] Adamnanus bemoans, when mentioning the fair of Jerusalem, the nuisances such as an influx of camels, horses, donkeys, and oxen transporting goods for the stallholders, as well as the narrowing of the roads and walkways due to the stacking of the merchandise.[35] The fairs, while they were Islamized, continued to follow a schedule determined since late antiquity to facilitate the travelling stallholders' itineraries. They were organized in two seasons: the first from the end of April to the start of the month of May (fairs in Diospolis/Ludd, Dayr Ayyūb) and the second from mid-October to the beginning of December (fairs in Boṣra, ʿAmmān, Aḏriʿāt, Ruṣāfa, Aleppo, Mu'ta, and Damascus). In antiquity, these two periods coincided with the preparation of the fields and sowing in the spring, as well as the harvesting of the crops from the end of the summer to the beginning of autumn. These periods were sacred and the fairs were held at these specific moments. After the Arab conquests, this calendar remained unchanged, while channelling the festive celebrations towards Islamic shrines enabled legitimization and maintenance of the popularity of these Christian, pagan, and Zoroastrian institutions in the context of the Islamification of everyday life.

2. MOSQUES AND MEASURES

The process of Islamizing existing economic institutions involved the evolution of the traditional regime of trade and craft regulation. In the early Islamic caliphate, mosques, as both places of worship and justice, came to play an increasingly important role in the administrative and legal management of the urban economy in the Near East. Under the Umayyad caliphs, up to the early eighth century, the settlement of commercial and artisanal disputes supposedly remained the responsibilities of both Christian and Muslim authorities.[36] Yet, in the eighth and ninth centuries, the growth of conversion

[34] MARAVAL, P. (2002) *Récits des premiers pèlerins chrétiens au Proche-Orient (IVe–VIIe siècle)* (Paris: Cerf) 240.

[35] MARAVAL, P. (2002) 240.

[36] TILLIER, M. (2013) 'Du pagarque au cadi : ruptures et continuités dans l'administration judiciaire de la Haute-Égypte (Ier–IIIe/VIIe–Ixe siècle)', *Médiévales* 64: 19–36. This research reconstructs the development of the legal system in Egypt from late antiquity to the ninth century ʿAbbāsid caliphate from a corpus of papyri. It demonstrates how local Christian pagarchs remained the principal authorities in terms of justice, alongside Muslim provincial governors (*amīr*) during the Marwānid period in 684–750.

meant that mosques replaced churches in giving guidance, preserving the official weights and measures, and appointing civil servants in charge of regulating trade and production.[37]

The increasing role of mosques in the regulation of daily economic practices can be observed in the plan of many Near Eastern cities in early Islam, through the interdependence of mosques and marketplaces. In the eighth and ninth centuries, mosques were generally built within marketplaces, as attested to by medieval geographers. Describing the old town of al-Qādisiyya in Iraq, al-Muqaddasī mentions a typical Sasanian settlement with a fortress in mud brick and a mosque built after the Arab conquests in the heart of the marketplaces.[38] Similarly, in his description of Baṣra, the tenth-century geographer locates the early Islamic congregational mosque in the central *sūq*s called the *sūq*s of bāb al-Jāmi'[39] attributed to Uṯmān b. al-ʿĀṣ al-Ṯaqafī. The shops spread alongside its north-western facade. The eighth- to tenth-century sources interestingly mention that these shops were mostly rented either by booksellers and textile retailers,[40] or money changers[41] and slave traders.[42] In the immediate vicinity of the Friday mosque were thus located the professions highly regarded or carefully controlled by local religious authorities.[43] In the cities of Wāsiṭ,[44] al-Daskara, Qaṣr ibn Hubayra, and Jabbul in Iraq,[45] a similar interdependence of Friday mosques and marketplaces existed, with the religious buildings built on the edge of the principal rows of shops. The raising of congregational mosques after the rise of Islam away from trade and craft in Near Eastern cities is rarely mentioned in the sources. This would have been the case in Marghīnān in Sogdia,[46] as well as Dayr al-ʿĀqūl[47] and Hulwān[48] in Iraq, where mosques were built within the old Sasanian fortified *quhandiz* and remote from the town economic life centralized in the suburbs.[49] In some

[37] BUCKLEY, R. P. (1992) 'The *Muḥtasib*', *Arabica* 39: 65–7.

[38] AL-MUQADDASĪ (1877) *Aḥsan al-taqāsīm fī maʿrifat al-aqālīm* (Leiden: De Goeje) 117.

[39] AL-MUQADDASĪ (1877) 117.

[40] AL- ǦĀḤIẒ (1955) *Kitāb al-biġāl* (Cairo) 29–30.

[41] AL-ḪAṬĪB AL-BAĠDĀDĪ (1931) *Ta'rīḫ Baġdād* 7 (Cairo) 386; NAṢĪRĪ ḪUSRAW (1945) *Safarnāma* (Cairo) 146.

[42] AL- ǦĀḤIẒ (1955) 29–30.

[43] Other examples of Near Eastern cities after the Muslim conquests with mosques built within their pre-Islamic or early Islamic marketplaces are reported by al-Muqaddasī and can be found at Tiberias, Qadas, al-Nuʿmāniyya, al-Madāʾin, al-Sinn, and Nisibe. Many other examples are mentioned in the section on the *Mašreq and the Šām*. AL-MUQADDASĪ (1877) 122–3, 140, 161–2, 165, 175. Ibn Ḥawqal, describing the cities of Zarandj in the Seistan and Herat and Balḫ in Bactriane, also signals this typical alliance of mosques and marketplaces in early Islamic towns. IBN ḤAWQAL (1939) 415, 437, 448.

[44] In Wāsiṭ, the Mosque of al-Ḥaǧǧāǧ, which had fallen into ruins in the tenth century, was originally built in the late seventh century on the edge of the markets according to al-Muqaddasī. AL-MUQADDASĪ (1877) 118.

[45] AL-MUQADDASĪ (1877) 118, 121–2.

[46] AL-MUQADDASĪ (1877) 272.

[47] AL-MUQADDASĪ (1877) 122.

[48] AL-MUQADDASĪ (1877) 123.

[49] See Chapter 2. It was typical in Iranian and Central Asian cities after the rise of Islam to centralize trade and production outside the late Sasanian settlements.

cities, marketplaces could also be incorporated into the fabric of the mosque and rented to subsidize the functioning of the building, as reports a document written by the Egyptian al-ʿUmarī, who held the position of *qāḍī* between 801 and 810. This document, known from its later transcription by al-Kindī, discusses the refurbishment of a mosque in Fusṭāṭ in the first decade of the ninth century. It aims to establish that the vicinities of the monument belonged to the public domain and could be transformed into shops whose rental would cover the costs of the work.[50] In the eighth and ninth centuries, the physical dependency of marketplaces and mosques, instead of churches, illustrates the growing role mosques acquired in urban economic regulation, the judicial and administrative system.

The specialities of the marketplaces surrounding Islamic religious buildings are hardly mentioned in the sources. Yet, when this information is provided, it is said that the immediate vicinities of Friday mosques were generally occupied by textile dealers and jewellers. In the early ʿAbbāsid caliphate, the Friday mosques of al-Rāfiqa[51] in Ǧazīra and the town of Bāshān[52] in Ḫurāsān were elevated nearby goldsmiths' *sūq*s (al-ṣāġat). In parallel, in early ʿAbbāsid Raqqa, the great mosque stood in the drapers' quarter named *al-bazzāzīn*. Similarly in Khuzistan at Tustar,[53] the mosque was raised amid the markets, among the cotton-cloth dealers (*al-karābīsiyīn*). This was also the case in the Levant in Ascalon,[54] as well as in Sogdia in the town of Tishān,[55] and in Fārs in Kūl,[56] where the Friday mosque was built after the Arab conquests among the market of the clothiers (*al-bazzāzīn*). In Central Asia in Buḫāra, the congregational mosque of the city was even built next to a *ṭirāz* workshop, in which Yazdī cloth and the hazel-coloured robe for the use of ʿAbbāsid caliphs were woven in the late ninth and early tenth centuries.[57] The attachment of Friday mosques to the *sūq*s of the textile dealers and jewellers reflects the high esteem garnered by these trades in Islam during the Middle Ages. It might also explain the involvement of Muslim gold- and silversmiths,[58] silk merchants, and drapers in religious learning and as upholders of Islamic jurisprudence from the ninth century.

The interdependence of mosques and marketplaces was certainly not coincidental; marketplaces acted as the centre of public life and were thriving

[50] TILLIER, M. (2009) *Les cadis d'Iraq et l'État Abbasside* (132/750–334/945) (Beirut: Ifpo) 399.
[51] AL-MUQADDASĪ (1877) 141.
[52] AL-MUQADDASĪ (1877) 312.
[53] AL-MUQADDASĪ (1877) 409.
[54] AL-MUQADDASĪ (1877) 174.
[55] AL-MUQADDASĪ (1877) 271.
[56] AL-MUQADDASĪ (1877) 432.
[57] AL-NARŠAḪĪ (2007) *The History of Bukhara*, ed. and trans. R. N. Frye (Princeton: Wiener) 21.
[58] For instance, Abū al-Ḥasan ʿAlī b. al-Jaʿd b. Ubayd al-Jawharī (d. 845) was a jeweller and became a famous *muḥaddith* in Baghdad in the ninth century. Al-ṬABARĪ [1879–1901] (1964) *Taʾrīḫ al-rusul wa al-mulūk* 1, Tertia Series (Leiden: Brill) 198; AL-ḪAṬĪB AL-BAĠDĀDĪ, 11 (1931) 360–6.

urban areas. In the early Middle Ages, the raising of Friday mosques amid them was connected with the incremental incorporation of Islam into daily urban and economic practices. Literary and archaeological testimonies illustrate the growing role of mosques, and the reciprocal decline of churches, as depositories of official weights and measures, taxes, and contracts. This peculiar administrative role of Friday mosques is outlined by al-Muqaddasī in his description of Merv. He mentions that the town gained great momentum in the middle of the eighth century during the rule of the Iranian general Abū Muslim. Throughout the early ʿAbbāsid era, Merv acted as the capital of Ḫurāsān, and its growth led to the development of a new settlement near the Majan canal. Abū Muslim commissioned the building of two Friday mosques, which reportedly hold an important role within the economic life of the urban centre. One of them, comprising the police *šurṭa* and the bureau of the land tax *dīwān al-ḫarāǧ*,[59] was located in the district of the money changers, called *al-ṣiyāraf*. The congregation of a religious building, the land-tax offices and the money changers[60] was not unique to Merv, but was also a characteristic of early Islamic Baṣra.[61] This method of organization has its origin in the system of tax collection, which depended in the eighth and ninth centuries on the support of money changers to lend peasants money,[62] and legal specialists or judges (*qāḍī*) to adjudicate disputes, as well as witness transactions and the registration of deeds. Money changers typically assisted all economic transactions, testing and weighing a large number of individual coins, and the mosque was most likely responsible for controlling the standards of currency they used. This leads us to suppose that the Mosque of Merv likely had a sort of bureau of standards[63]—an early equivalent of the late medieval *dār al-ʿiyār*—with official weights (*mawāzīn*) and measures (*makāyīl*) for coins and commodities.[64] The example of Merv illustrates the

[59] AL-MUQADDASĪ (1877) 311.

[60] Money changers are named in later sources *ǧahbāḏ* meaning money expert, experienced in most intricate affairs. See FISCHEL, W. (1933) 'The origin of banking in Mediaeval Islam: A Contribution to the Economic History of the Jews of Baghdad in the tenth century', *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 2: 339–52. This title may have already been used under the rule of al-Manṣūr (754–75), but became more common from the tenth century. See AL-ǦAHŠIYĀRĪ (1926) *Kitāb al-wuzarāʾ* (Leipzig) 53a, 63a.

[61] AL-ḪAṬĪB AL-BAĠDĀDĪ, 7 (1931) 386; NAṢĪRĪ ḪUSRAW (1945) 146.

[62] See for instance the history of Joseph ibn Phineas the money changer, who played a significant role in the financial administration of the ʿAbbāsid Empire under the rule of Caliph al-Muqtadir in the early tenth century. Joseph was made the official tax collector of al-Ahwāz. TORREY, C. (1943) 'The Evolution of a Financier in the Ancient Near East', *JNES* 2(4): 295–301.

[63] The existence of the *dār al-ʿiyār* responsible for controlling the standards of currency and of weights and measures is confirmed in the tenth century by Qudāma b. Jaʿfar (d. 948) in his *Kitāb al-ḫarāǧ*: '*fī l-nuqūd wa-l-ʿiyār wa-l-awzān wa-diwān dār al-ḍarb*'. Section V of QUDĀMA IBN JAʿFAR (1986) *Kitāb al-ḫarāǧ*, ed. Sezgin (Frankfurt: Institute for the History of Arabic-Islamic Science).

[64] Several coin weights have been published by George C. Miles, John Walker, and Paul Balog. For instance, the Islamic flat bronze weights engraved with the name of the governor of Iraq

growing involvement of Islamic religious institutions in the management of urban and rural economy, as well as the complex relationship that consequently emerged between the religious elite, legal specialists, and financiers.

There is no contemporary information on the status of money changers, measurers, weighers, and minters in the Umayyad and early ʿAbbāsid society. The eleventh-century account of al-Māwardī reports that they received a wage from public funds.[65] However, scholarship ignores whether this was already the case in the eighth and ninth centuries. Epigraphic evidence dating from the Umayyad and early ʿAbbāsid dynasties indicates that the production of weights and measures remained the duty of local Christian, Coptic, and Zoroastrian artisans after the rise of Islam. Many weights and measures bearing Coptic names as the designation of makers, and comprising grammatical and orthographic errors in the Arabic inscriptions, illustrate this pattern.[66] We can only speculate about the exact location of workshops designing weights and measures in the early Islamic caliphate. Information is sporadic, except al-Muqaddasī who reports the existence of a gate of the measurers, *darb al-Kayyālīn*,[67] in the capital of one of the provinces of Fārs, Arrağān, designating perhaps the working place of weighers and measurers in the urban environment in the ninth and tenth centuries. While official metrological instruments were safely stored in congregational mosques, this testimony shows that their production was probably relegated in imperial workshops immediately outside the busy urban environment. The sophistication and variety of weights and measures lead us to suppose that they were the product of specialized artisans with a specific name, although the literature does not associate it with an occupational *nisbah*.[68]

In provincial capitals, congregational mosques also held the *bayt al-māl*[69] or caliphal treasury, such as those preserved in Damascus,[70] as well as archives storing any contract of sale of lands, houses, as well as slaves and beasts of burden purchased in the marketplace. Standard in the Roman world of the first to fourth centuries, the use of contracts was less common under the Umayyads, as words and gestures were sufficient to conclude a business deal

al-Ḥağğāğ b. Yūsuf published by J. Walker in 1935. WALKER, J. (1935) *Some recent oriental coin acquisitions of the British Museum N.C.*, 5th series XV. See also BALOG, P. (1970) 'Islamic Bronze Weights from Egypt', *JESHO* 13(3): 233–56 and MORTON, A. H. (1986) 'A Glass Dīnār weight in the name of ʿAbd al-ʿAzīz b. Marwān', *BSOAS* 49(1): 177–82.

[65] SHATZMILLER, M. (1994) *Labour in the Medieval Islamic World* (Leiden: Brill) 308.

[66] LAUNOIS, A. (1969) 'Estampilles, Poids, Étalons monétaires et autres disques musulmans en verre', *BEO* 22: 69–126.

[67] AL-MUQADDASĪ (1877) 425.

[68] GHABIN, A. (2009) *Ḥisba, Arts and Craft in Islam* (Wiesbaden: Harrassowitz) 250.

[69] AL-MUQADDASĪ (1877) 182.

[70] In Damascus, the *bayt al-māl* was during the Umayyads situated inside the Great Mosque, on the north-western side of the courtyard. See AL-ṬABARĪ [1879–1901] (1964) 3, Secunda Series: 1790; AL-MUQADDASĪ (1877) 157.

according to Yūsuf Rāġib.[71] The use of contracts was revived in the ninth century, and congregational mosques became the depositories of these legal and economic documents, as the contract archive, replacing other, earlier, civic institutions. Most of these archives have disappeared, except a few contracts of sale from the tenth century discovered in the late nineteenth century in the Umayyad mosque of Damascus.[72] The mosque progressively stood within marketplaces as the centre of urban life, replacing the church as an institution dispensing judicial authority and regulating daily economic life after the rise of Islam.

3. THE *MUḤTASIB*

In a society marked by a strong impulse to ensure continuity between the teachings of the Qu'rān and the concrete organization of sociopolitical life, the development of congregational mosques within marketplaces meant that the existing regime of regulation of craft and retail was progressively exposed to and influenced by Islamic moral norms. The necessity to monitor the legality of economic behaviour, as well as the Islamic ethics of trade and manufacturing, became a critical issue for Muslim caliphs and the religious elite in the eighth and ninth centuries.

The Islamization of the function of inspector, in charge of trade, craft, weights, and measures constituted a primary driver in the implementation of Islamic norms into the urban economy. The Islamic traditions mention that this function of inspector already existed under the rule of the Prophet Muḥammad in Medina. Before his death, he is said to have appointed Saʿīd b. Saʿīd b. al-ʿĀṣ[73] and Samrā bint Nuhayk al-Asadiyya[74] to ensure the orderly running of economic affairs.[75] Yet, these Islamic traditions date back to the

[71] RĀĠIB, Y. (1997) 'La parole, le geste et l'écrit dans l'acte de vente', *Arabica* 44(3): 407–22. Among the hundreds of papyri dated to the period of the Arab-Muslim conquests and the Umayyad reign, from Egypt and Palestine, Yūsuf Rāġib mentions that there is only one contract about the sale of a mule between a Copt and a Muslim.

[72] SOURDEL, J., SOURDEL, D. (1965) 'Trois actes de vente damascains du début du IVe/Xe siècle', *JESHO* 8(2): 164–85.

[73] IBN ʿABD AL-BARR AL-QURṬŪBĪ (1960) *Al-Istīʿāb fī maʿrifat al-aṣḥāb* 2 (Cairo: Maṭbaʿat nahdat miṣr) 621.

[74] IBN ʿABD AL-BARR AL-QURṬŪBĪ (1960) 183; BUCKLEY, R. P. (1992) 'The Muḥtasib', *Arabica* 39: 60–1.

[75] After the death of the Prophet Muḥammad, the first four caliphs (Rašīdūn) would have perpetuated this practice of appointing inspectors at Medina and Mecca from 632. ʿUmar b. al-Ḫaṭṭāb (634–44) is also reported to have employed al-Šifā bint ʿAbd Allāh to oversee the market in Medina. IBN ḤAZM (1962) *Ǧamharāt ansāb al-ʿarab* (Cairo: Dār al-maʿārif) 150, 156. Al-Sā'ib b. Yazīd and ʿAbd Allāh b. ʿUṭba b. Masʿūd were designated as market inspectors during the caliphate of ʿUmar, and ʿUṯmān b. ʿAffān (644-56) is said to have appointed al-Ḥāriṯ

ninth century, and the veracity of these accounts can consequently be open to debate. It is most likely that they were produced to attribute to the Prophet the origin of a pre-Islamic practice.

Under the Umayyads, the office of market inspector seemed to have been a continuation of the late antique and Roman practice. Roman aediles were responsible for checking weights and measures, and most markets in Roman cities had standard weights and measures tables (*mensae ponderariae*). At Lepcis Magna, several stone benches or seats were set up out of the fines collected by the market inspectors in the first century. The persistence of this office finds an illustration on glass weights signed by Umayyad executives. A. H. Morton suggests that these signatures were those of inspectors of trade and craft, and inspired later the ʿAbbāsid norm of inscribing them on metrological instruments with the title *muḥtasib*. The earliest ʿAbbāsid stamp that bears this title—Muʿāwiya ibn Ẓufar the *muḥtasib* of the emir ʿAlī ibn Sulaymān—dates from the late eighth century and was produced in Egypt between 786 and 787.[76] Some sort of inspector, responsible for ensuring the running of marketplaces and crafts, likely existed from as early as 700, in particular in large cities, before the office was institutionalized from the reign of al-Manṣūr, when the caliph appointed ʿĀṣim al-Aḥwal (d. 759), former judge or *qāḍī* in al-Madā'in in Iraq, over the control of measures and weights in Kūfa.[77]

The sources illustrate that most inspectors of urban trade and craft after the rise of Islam were former judges or *qāḍīs*, well versed in Islamic religious and judicial learning, and capable of ensuring that economic behaviours were in accordance with the moral norms of the *sharīʿa*. For example, in 723, the office of market and craft inspector of Wāsiṭ in Iraq was given to Iyās b. Muʿāwiya, who then held the position of *qāḍī* in Baṣra.[78] In the early ninth century, the famous *qāḍī* of Kairouan, Saḥnūn b. Saʿīd (d. 854), was also involved in market inspection, and before him only the *wulāt* (governor) had possessed the authority to inspect and prescribe the correct means of practice.[79] Another later example of a judge becoming a *muḥtasib* is found in the case of Abū Saʿīd al-Istaḫrī (d. 940). He was originally the *qāḍī* of Qumm or Sijistan during the rule of Muqtadir, before being appointed as market and craft inspector in

b. al-Ḥakam over the *sūq* of Medina. AL-BALĀḎURĪ (1936) *Ansāb al-ašrāf* 5 (Jerusalem: Hebrew University Edition) 47.

[76] MORTON, A. H. (1991) 'Ḥisba and glass stamps in eighth- and early-ninth-century Egypt', in Y. Rāġib (ed.) *Documents de l'Islam médieval* (Cairo) 19–42.

[77] AL-ḪAṬĪB AL-BAĠDĀDĪ, 12 (1931) 243–7.

[78] AL-ṬABARĪ [1879-1901] (1964) Secunda Series: 1347; WAKĪʿ (1947) *Aḫbār al-quḍāh* 1 (Cairo) 353.

[79] GHABIN, A. (2009) 84.

Baghdad before his death.[80] The sources can contradict each other from time to time, but generally they reveal that the office of judge often preceded that of *muḥtasib*.

During the early ʿAbbāsids, between the reigns of al-Manṣūr (754–75) and al-Maʾmūn (813–33), the role of the market inspector was reinvented in response to the formation of Islamic jurisprudence and the drive to Islamize the society.[81] The investiture of the inspector became a ceremonial event. While the post was secular around 700 and alluded to the orderly running of the marketplace, with regard to weights, scales, and measures, it acquired a religious dimension from the late eighth century. The muḥtasib was increasingly given religious and moral obligations in addition to his secular duties,[82] as illustrated by the career of the Baṣran ʿAwwām ibn Ḥawshab (d. 765), whose family was well versed in legal offices—his father and brother held the office of chief of police (*šurṭa*). Although the sources do not describe him directly as a *muḥtasib*, they repeatedly mention that he had the role of 'forbidding wrong', in particular during a visit to the money changers.[83] This shows how the application of religious and Islamic ethics into trade and crafts became the principal mission of market inspectors during the ʿAbbāsid caliphate, and they could in fact combine this duty with a religious office. For instance, Muḥammad b. ʿUbaydallāh al-Ḫaṭīb was both *muḥtasib* and *imām* of the great mosque of Ruṣāfa in Baghdad between 897 and 912.[84] In this way, the moral actions of the inspectors were more inherent in the role than they had been for the late Roman agoranomos. Urban trade and manufacture in the Islamic Near East therefore developed within the moral prerogatives of Islam, which were actively applied to economic matters in a way that Christian morality was not in the Christian kingdoms of the West.

The main difficulty encountered in studying the living and working conditions of *muḥtasib*s remains the almost complete absence of contemporary literary material. Only short testimonies spread in a nebula of documents inform on the daily activities of those in charge of inspecting urban marketplaces and crafts. Ḥisba manuals certainly provide a great wealth of information. Nonetheless, they offer no more than a theoretical picture of the role of *muḥtasib* in early Islamic society. They generally copy each other and only provide technical data on the duties and responsibilities of inspectors monitoring transactions and craft. The thirteenth-century manual of Saqaṭī only seems to offer a more human perspective, including detailed testimonies on

[80] IBN ḪALLIKĀN (1842–71) *Biographical Dictionary* 1, trans. De Slane (Paris: Printed for the Oriental translation fund of Great Britain and Ireland) 375, 448–50.

[81] BUCKLEY, R. P. (1992) 'The Muḥtasib', *Arabica* 39: 59–117.

[82] BUCKLEY, R. P. (1992) 65–7.

[83] IBN BAḤŠAL (1967) *Taʾrīḫ Wāsiṭ* (Baghdad: Gūrgīs ʿAwwād) 114–15; IBN SAʿD (1904–21) *Al-Ṭabaqāt al-Kubrā* 7 (Leiden) 2, 60.

[84] AL-ḪAṬĪB AL-BAĠDĀDĪ, 2 (1931) 320.

the daily life and activities of *muḥtasib*s, from anecdotes probably reported by early inspectors themselves.

The *muḥtasib* was appointed to encourage the orderly and equitable running of the marketplace as well as ensure that the correct execution of Islamic ritual took place.[85] This included the prohibition of any individuals intending to export weapons to non-Muslim lands or of those Muslims who sold objects considered impure, such as wine, pork, and animals where the rituals of slaughter had not been observed, along with the control of the activities of the money changers.[86] Another target of the *muḥtasib*'s attention was the slave market or *sūq al-raqīq*, where he ensured slaves were correctly treated. He also had to ensure the clear passage of public highways.[87] The market inspector also monitored arts and crafts, such as builders, jewellers, metalworkers, textile craftsmen, carpenters, and potters, and related issues. He ensured, for instance, that construction procedures complied with religious, moral, and public ethics, in particular that painters, architects, and sculptors did not represent the human figure. Nevertheless, there was an important gap between theory and practice. In practice, the responsibilities of the *muḥtasib* were restricted to the common mass of people (*'āmma*), which explains the profusion of figurative representation in palatial monuments, such as at Ḫirbet al-Mafjar or Quṣayr 'Amra. Market inspectors controlled the process of manufacturing, ensuring, for example, that pottery kilns were not heated with human or other dung, or that saddle-makers or tanners did not use the skins of animals, which had died from natural causes.[88]

To guarantee respect for Islamic morality in economic activities, the *muḥtasib* kept the regulation of market exchange under the influence of local judges (*qāḍī*) and religious scholars (*'ulamā'*), reducing the role of caliphal authority in trade and production. Muslim theologians were against this form of intervention;[89] their opposition took inspiration from a tradition recorded in the early eighth century by the traditionalists Ibn Abī Ġassan and Ibn Zabāla, and later transmitted by al-Samhūdī in the fifteenth century. According to this tradition, Muḥammad demanded that merchants be free to set their own prices, instigating this practice in the market of Medina.[90] Al-Ṭabarī reports that the first four caliphs (Rašīdūn) perpetuated the Prophet's policy of giving the market more autonomy in establishing its own prices. While 'Umar b. al-Haṭṭāb (634–44), 'Uṯmān b. 'Affān (644–56), and 'Alī[91] (656–61)

[85] RODINSON, M. (1977) 'Les conditions religieuses islamiques de la vie économique', in *Geschichte der Islamischen Länder* 1 (Leiden: Handbuch der Orientalistik) 18–30.

[86] BUCKLEY, R. P. (1992) 87–9.

[87] SERJEANT, R. B. (1981) 'A Zaidi Manual of *Hisbah* of the 3rd Century (H)', in *Studies in Arabic History and Civilisation* (London: Variorum) 18; BUCKLEY, R. P. (1992) 92–3.

[88] SERJEANT, R. B. (1981) 8–9. [89] ABŪ YŪSUF (1969) 103–4.

[90] KISTER, M.J. (1965) 'The Market of the Prophet', *JESHO* 8: 272–6.

[91] IBN SA'D, 3 (1904–21) 1, 18.

requested to be informed of prices, they would have never intervened in the interplay of transactions.[92]

Significant in the late Roman and Sasanian Empires,[93] royal control of prices and transactions diminished in the early Middle Ages, with Umayyad caliphs limiting, without fully discarding, the practice of price-setting and their control over selling and buying. In his famous early-eighth-century fiscal rescript, Caliph ʿUmar II's public condemnation of Umayyad officials abusing their authority to influence the daily conduct of trade and crafts[94] suggests that there was still a form of involvement. However, the increasing religious duties of the market inspector under the early ʿAbbāsids certainly helped to curtail this practice, which was against Islamic morality.[95]

There is little evidence of imperial involvement in market regulation and price-setting in the ninth- and early-tenth-century chronicles to suggest otherwise. Al-Ṭabarī indicates that al-Manṣūr could use his influence to limit price fluctuation,[96] and Ibn Ḥawqal reports that in the early tenth century the imperial authorities were setting the selling price of madder in Transoxiana, probably because this root harvested by local peasants and sold across the entire caliphate was highly prized by the court and palatial elite.[97] In most cases, nonetheless, ʿAbbāsids' involvement in influencing prices caused confusion and often led to rebellion, as occurred under the caliphate of al-Muqtadir (908–32) and the vizierate of Ḥāmid b. al-ʿAbbās, according to the testimonies of Miskawayh (d. 1030),[98] later corroborated by Ibn al-Jawzī (d. 1200).[99] Ibn al-Ǧawzī indicates that in 920 in Baghdad, after the vizier had returned from al-Ahwaz, the prices of commodities in the marketplace rose significantly. This culminated in a revolt, with the population of Baghdad gathering at the door of the caliphal palace. Al-Muqtadir ordered his army to intervene and disperse the rioters. As revenge, the population tried to prevent the Imam leading the Friday prayers; they destroyed the mosque's minaret, burned the office of the *šurta* (police), and damaged bridges. To restore law

[92] AL-ṬABARĪ [1879–1901] (1964) 1, Prima Series: 2718; IBN SA'D, 3 (1904–21) 1, 18, 40.

[93] In late Roman Syria, price fixation took place locally in consultations between commercial corporations and the prefecture, while in Sasanian Iraq and Iran it was carried out by the chief of the merchant class or *vāstryōšbaḏ*. ROZENFELT, B. T. (2005) *Markets and Marketing in Roman Palestine* (Leiden: Brill) 137–41; DARYAEE, T. (1998) 'Sassanian Persia (224-651)', *Iranian Studies* 31: 453; (2010) 'Bazaars, Merchants, and Trade in Late Antique Iran', *Comparative Studies of South Asia, Africa and the Middle East* 30(3): 401–9.

[94] IBN ʿABD AL-ḤAKAM (1966) *Sīrat ʿUmar b. ʿAbd al-Azīz* (Damascus: al-Maktaba al-ʿArabiyya) 98. In his rescript, Caliph ʿUmar II also forbade officials to have two wages and work in both the public and palatial spheres (*ʿāmma wa al-ḫāṣṣa*). GUESSOUS, A. (1996) 'Le rescrit fiscal de ʿUmar b. ʿAbd al-Azīz: une nouvelle appréciation', *Der Islam* 73: 130.

[95] ABŪ YŪSUF (1969) *Kitāb al-ḫarāǧ* (Leiden: Brill) 103–4.

[96] Al-ṬABARĪ [1879-1901] (1964) 1, Prima Series: 435.

[97] IBN ḤAWQAL (1939) 477.

[98] MISKAWAYH (1920–1) *Taǧārib al-umam wa al-taʿāqub al-himam* 1, trans. H. F. Amedroz, D. S. Margoliouth (Oxford) 73–4. See also IBN AL-JAWZĪ (1937) *al-Muntaẓam fī tārīḫ al-mulūk wa al-umam* 6 (Hayderabad: Maṭbaʿat dairat al-maʿārif al-uṯmaniya) 156.

[99] IBN AL-ǦAWZĪ (1937) 156.

and order, the caliph was forced to become involved in regulating the price fluctuation and ordered that a kurr of wheat (around 3,000kg) be priced at no more than 5 dinars. It is likely that this example of elite involvement in the manipulation of price was not uncommon, despite religious interdicts. Nevertheless, it seems that the objections of religious authorities and *muḥtasib*s to the caliphs' interference in the marketplace posed a considerable deterrent to their control of prices and regular intervention in trade. The moderate influence of early Muslim caliphs in trade allowed merchants greater latitude to conduct their business. This finds an illustration in al-Ǧāḥiẓ's short account about the Baṣran retailer al-Ḥizāmī in the ninth century. Al-Ḥizāmī used to travel to Kūfa every year to buy large quantities of wheat to be resold later in Baṣra. The price of wheat was not only based on weight, but also on quality. While the use of official weights and measures prevented fraud, the price of the grain differed significantly from one shop to another, as Kūfan traders were free to offer and negotiate on what they thought was appropriate, depending on the perceived quality of their wheat.[100]

The relative freedom of merchants to engage in commerce was no doubt the mainspring of urban economic prosperity in the Near East during the eighth and ninth centuries, and individual traders could amass a fortune. This freedom was intellectually reinforced by occurring in the context of the prevalence of the Ḥanafī legal school in Iraq that favoured placing more reliance on independent reasoning and local customs as a source of law, than on oral traditions. In the eighth and ninth centuries, exchanges benefited greatly from this religious and judicial approval.

Merchants who were building inventories of goods and waiting for an increase in their value no longer found barriers limiting such activities.[101] Literary testimonies also mention the development of mercantile networks to acquire goods cheaply, where they were produced in abundance, with the view of retailing them for higher prices in areas of scarcity, as evident in the ninth-century pearl trade.[102] A meaningful arbitrage was therefore orchestrated to buy goods cheaply where they were plentiful and sell them where they were scarce, facilitating the distribution of goods throughout the caliphate.

Similarly, there is evidence of merchants taking advantage of shortages or famines to sell their goods at inflated prices. For instance, in 766–7, when the

[100] AL-ǦĀḤIẒ (1951) *Kitāb al-buḫalā'*, *Le livre des Avares*, trans. C. Pellat (Paris: Maisonneuve) 86.

[101] Evidence of Roman and late Roman speculation is not rare though. For instance, Kyle Harper in his work on *Slavery in the Late Roman World* demonstrates that in Egypt some of the civic notables who were prominent in slave sales were speculating, buying slaves from merchants, and reselling them locally. Papyri illustrate an important speculation on human merchandise. HARPER, K. (2011) *Slavery in the Late Roman World, AD 275–425* (Cambridge: Cambridge University Press) 96; CARRIÉ, J.-M. (2012) 'Were Late Roman and Byzantine Economies Market Economies?', in C. Morrisson (ed.) *Trade and Markets in Byzantium* (Washington DC: Dumbarton Oaks) 16.

[102] AL-MĀSAWAYH (1977) *Al-Ǧawāhir wa ṣifātihā* (Cairo) 26–32.

army of al-ʿAbbās b. Muḥammad (the brother of Caliph al-Manṣūr), in a campaign against the Byzantines, suffered from famine near the fortress of Qamḥ in western Armenia, the Zuqnīn chronicle tells us that 'the traders, shopkeepers, textile dealers and others like them all gathered from Ǧazīra and Armenia to sell at exorbitant prices wheat, barley, flour and products necessary for human life. They accumulated them abundantly in heaps, thinking to gather for themselves a great wealth.'[103] Two years later, in 769, when a major famine occurred in Ǧazīra, due to the crops drying out, Zuqnīn reports that 'those that owned the grain closed their hands tight and refused to sell wheat [at the usual price].'[104] Julian faced the same problems in Antioch in the 360s,[105] and the emperor decided to import wheat and sell it under better conditions to regulate the prices temporarily. In this case, the imperial determination was able to solve the situation. By contrast, the personal involvement of Muslim rulers remained much more modest in early Islam in managing food supply, in the context of famine and drought. Literary testimonies therefore highlight how the commercial success of the early Islamic world lay not only in developing and promoting the efficiency of marketplaces but also in a more flexible regulation and decline in imperial involvement in trade mechanisms.

The process of Islamification of daily life acted as a powerful generator of early medieval urban and economic efflorescence. Islamic legitimacy was provided to Christian, pagan, and Zoroastrian fairs, which formed then popular commercial events, while the institutionalization of Friday markets acted as a way to assert Islamic ideology in pre-existing settlements, as well as expand local and regional exchanges. The increasing interdependence of mosques and marketplaces, and the Islamization of the function of inspector of trade and crafts, in the context of the formation of Islamic jurisprudence in the ninth century, transformed and triggered the urban economy. As noted by Edouardo Manzano and Susana Narotzky, this gave way to a more moral economy,[106] while the wide use of reasoning and consensus allowed for more flexible accommodation of legal principles to market mechanisms. A key consideration of the commercial success of the Islamic world must lie in the ways of regulating trade, which developed in the Near East in the course of the late eighth and early ninth centuries, and allowed Islamic moral norms to concur with the operations of the marketplace.

[103] HARRAK, A. (1999) *The Chronicle of Zuqnīn* (Toronto: Pontifical Institute) 213–14.

[104] HARRAK, A. (1999) 275.

[105] FERRER-MAESTRO, J. J. (2014) 'Speculation and Crisis: Some Examples in the Eastern Povinces of the Later Roman Empire', in A. de Francisco Heredero, D. Hernández de la Fuente, S. Torres Prieto (eds.) *New Perspectives on Late Antiquity in the Eastern Roman Empire* (Cambridge: Scholars Publishing) 249–50.

[106] NAROTZKY, S., MANZANO, E. (2014) 'The Ḥisba, the Muḥtasib and the Struggle over Political Power and a Moral Economy. An Enquiry into Institutions', in J. Hudson, A. Rodriguez (eds.) *Diverging Paths? The Shapes of Power and Institutions in Medieval Christendom and Islam* (Leiden: Brill) 30–54.

Conclusion to Part III

The monetary reforms of the early Middle Ages, as well as the conscious Islamification of daily life and practices, in the context of the assertion of the Umayyad and early ʿAbbāsid caliphates, functioned as powerful generators of economic change. Not only did they create a favourable environment for trade and production, they also provided an ideological legitimacy to earning and spending.

As early as the late seventh century, ʿAbd al-Malik's coin standardization reforms fostered trade within the Islamic world by supporting the development of a single monetary zone. There was then money aplenty from the stocks left by Byzantines and Sasanians, as well as the dehoarding of late antique treasures. Progressively, the development of a system of cash stipends and state pensions in cash (*ʿatā*) to Muslim warriors in the seventh century,[1] and later the emergence of the banking system and the rise of a powerful mercantile elite from the late eighth and early ninth centuries, generated a need for more currency. Through the increasing exploitation of ores and the expansion of minting, ʿAbbāsid caliphs provided the economy with the support of increased monetization. The monetary policy formulated by early Islamic caliphs certainly appeared as a symptom of the *long-term* tendency of encouraging the monetization of the urban and rural economies, which began in late antiquity and reached an unparalleled level after the rise of Islam. In combination with an Islamic ideology praising commerce,[2] and favourable to earning wealth, investing, and consuming, it catalysed further urban economic expansion and change.

In parallel, the eighth and ninth centuries witnessed the growing influence of Islamic law and morality into the regulation and administration of the

[1] DONNER, F. (2016) *The Early Islamic Conquests* (Princeton: Princeton University Press) 242.

[2] Islamic norms are not necessarily against ascetism. The *kitāb al-kasb*, for instance, as argues M. Bonner, praises a compromise between ascetic denial and over-accumulation. BONNER, M. (2001) 'The *Kitāb al-Kasb* attributed to al-Shaybānī: Poverty, Surplus, and the Circulation of Wealth', *JAOS* 121(3): 410–27.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard, Oxford University Press (2020).
DOI: 10.1093/oso/9780198855828.001.0001

urban economy. As part of a conscious policy to Islamify daily life in the Near East and Central Asia, market days were institutionalized on Fridays after the Morning Prayer. Christian, pagan, and Jewish seasonal fairs, which were vibrant commercial gatherings in the Roman and Sasanian Empires, were consciously perpetuated, their Islamization legitimizing their survival after the Muslim conquests. This most likely also ensured their acceptance by a rising elite of Islamic jurists and scholars (*fuqahāʾ* and *ʿulamāʾ*) in the ninth century.

In the context of the Islamification of urban economic life, Friday mosques came to replace churches as depositaries of contracts and official weights and measures, guarded and controlled by the *qāḍī*, who also, from the late eighth and ninth centuries, appointed the *muḥtasib* in charge of inspecting crafts and transactions in marketplaces. With the formation of Islamic jurisprudence, the role of inspectors evolved to implement the principle of the *sharīʿa* into economic life. The function of *muḥtasib*, traditionally oriented towards the monitoring of the orderly and equitable running of urban crafts and trade, became religious, as a way to ensure that Islamic law and morals were respected. Yet, this evolution did not hinder urban economic development. Religious scholars often had a commercial background, and legal norms did not function as barriers in the pursuit of wealth and the conduct of crafts and retail. On the contrary, their implementation constituted a move towards a less restricted economic life, as the *muḥtasib* henceforth limited the traditionally significant involvement of political authorities into crafts and trade. In early Islam, something of a dialectical relationship emerged between Islamic law and morality on one side and the nature of urban economic life and betterment on the other. This enabled the development of an economy with an Islamic ethic.

Part IV

Economy and Social Changes

8

The Evolution of Labour Patterns

The identity and conditions of labour of producers and traders in early Islam still remain understudied, while original research has been published on artisans, merchants, and consumers in the eleventh- to twelfth-century Middle East by A. Miquel and M. Shatzmiller,[1] as well as during the Ottoman era in Istanbul and Cairo by J.-Cl. Garçin[2] and S. Faroqhi.[3] This strongly contrasts with the scholarship on the Roman world[4] and medieval western and northern Europe, which has recently dedicated much attention to the way of life of traders, craftsmen, and craftswomen during the Carolingian Empire and among the Vikings.[5]

The evolution of craftspersons' (*al-ṣināʿāt*) social status from late antiquity to early Islam is the focus of this chapter. In the late Roman and Sasanian Empires, urban labour was both free and servile,[6] as shown by P. Garnsey,[7] C. Whittaker,[8] D. Rathbone,[9]

[1] SHATZMILLER, M. (1994) *Labour in the Medieval Islamic World* (Leiden: Brill).

[2] GARCIN J.-Cl. et al. (1983) *Palais et maisons du Caire: Epoque ottomane, XVIe–XVIIIe siècles* (Paris: Editions du Centre National de la Recherche Scientifique).

[3] FAROQHI, S. (2009) *Artisans of Empire: Crafts and Craftspeople Under the Ottomans* (London: I.B. Tauris).

[4] WILSON, A., FLOHR, M. (eds.) (2016) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press).

[5] For a discussion of recent scholarship on artisans in medieval and modern Europe, see HANSEN, G., ASHBY, S. P., BAUG, I. (eds.) (2015) *Everyday Products in the Middle Ages. Crafts, Consumption and the Individual in Northern Europe c. AD 800–1600* (Oxford: Oxbow).

[6] CAMERON, A. [1993] (2012) *The Mediterranean World in Late Antiquity: AD 395–700* (London: Routledge) 88.

[7] GARNSEY, P. (ed.) (1980) *Non-slave labour in the Greco-Roman world* (Cambridge: Cambridge Philological Society).

[8] WHITTAKER, C. R. (1980) 'Rural labour in three Roman provinces', in P. Garnsey (ed.) *Non-slave labour in the Greco-Roman world* (Cambridge: Cambridge Philological Society) 73–99.

[9] RATHBONE, D. W. (1989) 'The Ancient Economy and Graeco-Roman Egypt', in *Egitto e storia antica dall'ellenismo all'età araba: Atti del colloquio internazionale, Bologna, 31 Agosto-2 Settembre, 1987* (Bologna) 159–76; (1991) *Economic Rationalism and Rural Society in Third-Century A.D. Egypt: the Heroninos Archive and the Appianus Estate* (Cambridge: Cambridge University Press); see also MACMULLAN, R. (1987) 'Late Roman Slavery', *Historia* 36: 379–82;

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020). © Fanny Bessard.
DOI: 10.1093/oso/9780198855828.001.0001

E. Wood,[10] and recently J. Banaji.[11] Self-employment was a common practice, as was wage labour, and J. Banaji argues that the existence of cash payment indicates the widespread presence of free hired labour in the late Roman countryside from 300 to 700.[12] Moreover, in late antiquity, most craft professions were seen as unclean,[13] and there was little fascination for the process of production.[14] Epigraphic evidence and remains of tools and workshops indicate that craftworkers carried out their profession mostly from home, individual ateliers, or royal workshops, and could be highly specialized.[15] Similarly, Sasanian artisans belonged to the masses or *vāstryōshān*, as is described in literary testimonies.[16] They were not regarded positively by the elite of bureaucrats, warriors, and priests in control of their activities. They performed their craft mostly from home or individual facilities, as discovered in Weh-Ardašīr, unless they belonged to a royal workshop.[17]

In the early medieval Near East, how did the artisans' social status and women's involvement in urban production evolve in the context of the Islamization of the society? Did the coming of Islam reshape the division of

KIRSCHENBAUM, A. (1987) *Sons, Slaves and Freedmen in Roman Commerce* (Jerusalem: The Hebrew University).

[10] WOOD, E. M. (1988) *Peasant-Citizen and Slave: The Foundations of Athenian Democracy* (London: Verso) 3.

[11] See the discussion on historiography of labour patterns in late antiquity in BRASS, T. (2011) *Labour Regime Change in the Twenty-First Century. Unfreedom, Capitalism and Primitive Accumulation* (Leiden: Brill) 118–20.

[12] This said, J. Banaji argues that cash payments generally constituted loans more than salaries, used to bond and immobilize labour, while T. Brass demonstrates that this constituted in fact a system of indebtment, through which the elite enforced control over the supply of labour and limited the mobility of workers. BRASS, T. (2011) 123.

[13] KAPLAN, M. (2001) 'Les artisans dans la société byzantine (VIIe–XIe siècles)', in N. Necipoglu (ed.) *Byzantine Constantinople: Monuments, Topography and everyday Life* (Leiden: Brill) 245–60.

[14] JANES, D. (1998) *God and Gold in Late Antiquity* (Cambridge: Cambridge University Press) 36.

[15] MALOUTA, M. (2014) 'The Papyrological Evidence for Water-Lifting Technology', in H. D. Baker, M. Jursa (eds.) *Documentary Sources in Ancient Near Eastern and Greco-Roman Economic History* (Oxford: Oxbow) 154–62. The author analyses the papyrological data on water-lifting devices in antiquity. She argues that the late Roman era was marked by significant technological innovation in irrigation. The remains of complex machineries, whose construction required highly skilled craftsmen, suggest that the late Roman world was already characterized by significant labour specialization. See also SODINI, J. P. (1979) 'L'artisanat urbain à l'époque paléochrétienne', *Ktèma* 4: 71–119; BURFORD, A. (1972) *Craftsmen in Greek and Roman Society* (London: Thames & Hudson) 98–101.

[16] CHRISTENSEN, A. (1944) *L'Iran sous les Sassanides* (Paris: P. Geuthner) 98–9; ROSE, J. (1998) 'Three Queens, Two Wives, and a Goddess: Roles and Images of Women in Sasanian Iran', in R. G. Hambly (ed.) *Women in the Medieval Islamic World* (New York: St. Martin's) 29–54; DARYAEE, T. (2012) 'The Sasanian Empire (224–651 CE)', in *The Oxford Handbook of Iranian History* (Oxford: Oxford University Press) 189.

[17] PIGULEVSKAÏA, N. V. (1963) *Les villes de l'État iranien aux époques parthe et sassanide. Contribution à l'histoire sociale de la basse antiquité* (Paris: La-Haye) 160.

labour? The relative lack of scholarly focus[18] on the identity and life of urban artisans in early Islam is a result of relatively inaccessible evidence. Evidence is scattered across a wide spectrum of literary and material sources. Moreover, it is mainly a literary approach that has been favoured in scholarship to date, although epigraphic, pictorial, and archaeological evidence brings valuable information, for a more varied and complex picture than that which can be derived from historical sources alone. The informational value of epigraphic and iconographic evidence to discuss the identity and status of artisans and merchants has long been recognized in Roman historiography, since the foundational work of S. Treggiari in the 1970s on occupations and female labour in Rome.[19] By contrast, they have been so far largely ignored in the early Islamic scholarship.[20]

Yet, in the Near East and Central Asia, masons, potters, iron- and glass-makers have produced an important quantity of Arabic and Aramaic inscriptions, including signatures and stamped marks. Fifty-one of them have been listed in a database for the purpose of this study. Information can be gleaned on their status and whether they were masters, patrons, slaves, or apprentices, according to the onomastic, size, and location of the signature on the object. Similarly, the involvement of women and juveniles in production in early Islam is confirmed by the occurrence of female signatures, and can thus be investigated further. Certain signatures mention the artisans' training, whether it came through apprenticeship or familial tradition. This data will be used to identify craftsmen and craftswomen, and investigate their way of living and labouring between 700 and 950, while literary testimonies, despite

[18] Since the late twentieth century, the historiography on early medieval producers from 700 to 1000 has included a few articles and book chapters published in Michael Morony's *Manufacture and Labour*, but no in-depth studies of their statuses, gender, or mode of labour. GOLDZIHER, I. (2003) 'The Crafts among the Arabs', in M. G. Morony (ed.) *Manufacturing and Labour*, series: the Formation of the Classical Islamic World 12 (Aldershot: Ashgate) 145–50; BRUNSCHVIG, R. (2003) 'Base Trades in Islam', in M. G. Morony (ed.) *Manufacturing and Labour* (Aldershot: Ashgate) 151–66; FINSTER, B. (2003) 'Craftsmen and Groups of Craftsmen in the First Centuries of Islam', in M. G. Morony (ed.) *Manufacturing and Labour* (Aldershot: Ashgate) 199–210.

[19] TREGGIARI, S. (1975) 'Roman Social History: Recent Interpretations', *Social History* 8: 149–64; (1980) 'Urban Labour in Rome: Mercennarii and Tabernarii', in P. Garnsey (ed.) *Non-Slave Labour in the Roman World* (Cambridge: Cambridge University Press) 48–64; for an extensive survey of the historiography on Roman labour see FLOHR, M., WILSON, A. (2016) 'Roman Craftsmen and Traders: Towards an Intellectual History', in A. Wilson and M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 23–54.

[20] Epigraphic and iconographic sources reporting on the life and conditions of labour of traders and artisans have been rarely taken into consideration. See SAUVAGET, J. (2003) 'An Introduction to the Study of Muslim Ceramics', in M. G. Morony (ed.) *Manufacturing and Labour* (Aldershot: Ashgate) 63–117; FINSTER, B. (2003) 199–210; and more recently BLAIR, S. (2015) 'Place, Space and Style: Craftsmen's signatures in Medieval Islamic Art', in A. Eastmond (ed.) *Viewing Inscriptions in the Late Antique and Medieval World* (Cambridge: Cambridge University Press) 230–47.

their paucity, help to determine the artisans' relationship with the early Islamic state apparatus.

1. CONDITIONS OF LABOUR

The majority of the fifty-one signed glass, metal, textile, and earthenware artefacts collected and dated from the Umayyad and early ʿAbbāsid caliphates up to the late tenth century bear individual craftsmen's signatures. The names identified are Arabic (such as Nuwayr ibn Bušr ibn Ǧozayma,[21] ʿAṭiyya ibn Ǧamīl,[22] Ḥabrūna ibn Yūsuf,[23] Kasīm,[24] ʿUmār ibn Ibrahīm,[25] Ǧayrūn ibn Yūsuf,[26] Ibn Ḥudayǧ,[27] Ḥassān,[28] Husayn,[29] Yazīd b. Ṣuhayb, Ǧaʿfar ibn Yusūf, Muslīm, and Bišr ibn Ṣāmid[30]). They are also Aramaic (šamw'a[31]), as well as Arabic transcriptions of Greek names (Tadūr—Theodore—ibn Aṣ[32] or Nuḏūr ibn Ṣtafan[33]) and of Aramaic names (Aṣtura,[34] Ibn Aṣṭān,[35] and Ibrāhīm al-Naṣrānī[36]), which illustrate the Islamization of indigenous artisans in the eighth and ninth centuries. Some names include a

[21] AL-KHOULY, M. (2001) 'Nouvelles lampes inscrites de la période omeyyade', in E. Villeneuve, P. M. Watson (eds.) *La céramique byzantine et proto-islamique en Syrie-Jordanie. IVe-VIIIe siècles Apr. J.-C.* (Beirut: Ifpo) 193–6.

[22] AL-KHOULY, M. (2001) 193–6.

[23] ʿAMR, ʿA. (1988) 'Two Early Abbasid Inscribed Pottery Lamps from Ǧeraš', in *Zeitschrift des Deutschen Palästina-Vereins* 104: 146–9.

[24] GARSTANG, J. (1953) *Prehistoric Mersin* (Oxford: Clarendon Press) 261.

[25] RICE, D. S. (1958) 'Early Signed Islamic Glass', *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 1–2: 10–11; LAMM, C. J. (1930) *Mittelalterliche Gläser* 1 (Berlin) 59; 2 (1930) pl. 13.

[26] CLERMONT-GANNEAU, Ch. (1900) 'Deux nouveaux lychnaria grec et arabe', *Recueil d'Archéologie Orientale* 3: 43–7; ʿAMR, ʿA., KHAIRY, N. I. (1986) 'Early Islamic Inscribed Pottery Lamps from Jordan', *Levant* 18: 147.

[27] ʿAMR, ʿA. (1986b) 'More Islamic Inscribed Pottery Lamps from Jordan', *Berytus* 34: 163.

[28] ʿAMR, ʿA. (1986b) 167.

[29] SARRE, F. (1930) 'Frühislamische Keramik aus Mesopotamien', *Cicerone* 22: 39, fig. 2; GALLOIS, H. (1928) 'La Céramique archaïque de l'Islam', *Aréthuse* 5: 141.

[30] ʿAMR, ʿA., KHAIRY, N. I. (1986) 150.

[31] NAVEH, J. (1988) 'Lamp Inscriptions in Inverted Writing', *Israel Exploration Journal* 38(1/2): 36–43.

[32] CLERMONT-GANNEAU, Ch. (1898) 'Le lychnarion arabe de Djerach', *Recueil d'Archéologie Orientale* 2: 47–51.

[33] ʿAMR, ʿA., KHAIRY, N. I. (1986) 147.

[34] DAVIAU, M., BECKMANN, M. (2001) 'Umayyad Painted Pottery and Abbasid Period Lamps at Tell Jawa: A Chronological Dilemma', in E. Villeneuve, P. M. Watson (eds.) *La céramique byzantine et proto-islamique en Syrie-Jordanie. IVe-VIIIe siècles Apr. J.-C.* (Beirut: Ifpo) 264–5.

[35] ʿAMR, ʿA., KHAIRY, N. I. (1986) 150–1.

[36] GROHMANN, A. (1971) *Arabische Paläographie* 2 (Vienna), Table XIV, 2; FINSTER, B. (2003) 199–210.

nisbah that sometimes indicates the artisan's home base (as al-Basrī,[37] for instance) and only a few of them have a *kunya* (Abū Ḥassūn,[38] Abū Ṭālib).[39]

These craftsmen's signatures provide valuable information on their identity and conditions of labour in the early Middle Ages, for which historical sources are almost uninformative. They suggest that slaves, born into slavery or purchased, remained actively involved in urban production in early Islam. Yet, despite a continued dependence on this source of labour in the early Middle Ages, the extensive public- and economic-building programme that the Muslim elite launched generated a huge demand for skilled and unskilled craftsmen. This created a lively market for free labour resulting in the migration of rural population to towns.

1.1 Servile labour

In continuity with late antiquity, urban production remained supplemented by servile labour after the rise of Islam. Although the historiography has mainly focused on military and domestic slavery,[40] it appears that slaves continued to be used in public and family workshops in the ninth and tenth centuries. The urban chronicler al-Ḫaṭīb al-Baġdādī mentions that the weaver 'Abdallah al-Nassāǧ in tenth-century Baghdad ran a textile workshop near Bāb al-Kūfa, where several slaves were employed to produce silk fabrics.[41] This shows that slaves were not only used for the crudest forms of work, but could also be used to carry out skilled tasks. They were certainly used in pottery and ivory industries, according to epigraphic evidence. From the 1971 Fusṭāṭ expedition of Wladyslaw Kubiak, we possess a little fragment of an unglazed lamp, dating from the eighth century, that bears the inscription *'umila 'Abd* on the channel between the filling and the wick hole.[42] W. Kubiak indicates that

[37] ETTINGHAUSEN, R. (1942) 'An early Islamic glass-making center', *Record of the Museum of Historic Art, Princeton University*: 4–7; RICE, D. S. (1958) 'Early Signed Islamic Glass', *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 1–2: 8–9; LANE, A. (1939) 'Glazed Relief Ware of the Ninth Century', *Ars Islamica* 6: 59.

[38] 'AMR, 'A. (1986b) 167.

[39] SAUVAGET, J. (1948) 'Une signature de potier persan sur un tesson d'al-Fusṭāṭ', *Ars Islamica* 13(4): 148–9.

[40] The exploitation of slaves for domestic purposes in early Islamic Iraq is well reported in ninth- and tenth-century Arabic literature, specifically in the *adab*. For instance, al-Ǧāḥiẓ indicates in his *Kitāb al-buḫalā'* that slaves were used as cooks. AL-ǦĀḤIẒ (2012) *Kitāb al-buḫalā'* (Beirut: Alaalami co.) 68–9; (1951) *Le livre des Avares* (Paris: Maisonneuve) 79–80.

[41] ḪAṬĪB AL-BAĠDĀDĪ (1931) *Ta'rīḫ Baġdād* 8 (Cairo: al-Maktaba al-'arabiyya) 245–6; SABARI, S. (1981) *Mouvements populaires à Baghdad à l'époque 'Abbasside. IXe-XIe siècles* (Paris: Maisonneuve) 25.

[42] KUBIAK, W.B., SCANLON, G. T. (1979) 'Fusṭāṭ Expedition: Preliminary Report, 1971: Part I', *Journal of the American Research Center in Egypt* 16: 105–6, fig. 10b.

this could be read as 'was made by a slave', even though this might be too literal.

The continued reliance on slaves in the first centuries of Islam in urban production of pottery, glass, or metal is also reflected in the absence of *kunya* in almost all Arabic signatures of craftsmen. As noted by Y. Rāġib, slaves often bore only one name chosen by their master, as teknonyms constituted an honorific title.[43] The ivory Pamplona casket for the Umayyad ruler Hishām II in Spain in 1004–5 was produced by a master craftsman named Farağ, and his slaves, whose names, incised in inconspicuous places in various figural scenes, reflect their status. They are typically auspicious attributes for slaves, such as Misbah (light), Ḫayr (goodness), Rašīd (rightly guided), and Saʿada (felicity).[44]

Still, not all slaves engaged in craft were necessarily professional artisans. Some of them combined household duties with petty artisanal labour, which was already a trait of the Roman economy. This craftwork was not exclusively for household consumption, as slaves sometimes produced and supplied merchandise, which was sold by their patrons. This practice finds an illustration in the 'Rules and Regulations' of the ʿAbbāsid court of the late-tenth-century writer Hilāl al-Ṣābi'. Al-Ṣābi' explicitly relates that under the caliphate of al-Ma'mūn (813–33), one of the ruler's civil servants possessed many slaves. Among them, Naṣr ('*ġulām*') performed both skilled and domestic labour. He was used to weave and fashion turbans on demand, which were sold by his master to elite officers.[45] A similar account, confirming the continuous use of domestic servants for skilled labour under the ʿAbbāsids, is given by the early-eleventh-century urban chronicler al-Ḫaṭīb al-Baġdādī. Reporting on Abū Ḥifis, who was both a traditionalist and textile dealer in ninth-century Baghdad, he mentions that his domestic servants combined physical labour with the production of fine needles (most likely in wood and bone) for sewing, weaving, and basket-making, which required great patience and dexterity.[46] The first centuries of Islam were thus marked by the endurance of slave labour in various crafts, although perhaps not with the same breadth and scale.

1.2 Free labour

Alongside the survival of slave labour, self-employment remained common in the eighth and ninth centuries. The Greek (Tadūr ibn Aṣ,[47] Nuḏūr ibn

[43] RĀĠIB, Y. (2013) 'Esclaves et affranchis trahis par leur nom dans les arts de l'Islam médiéval', in C. Müller, M. Roiland-Rouabah (eds.) *Les non-dits du nom. Onomastique et documents en terres d'Islam* (Beirut: Ifpo) 247–301.

[44] BLAIR, S. (2015) 230–47.

[45] Al-ṢĀBI' (1964) *Rusūm Dār al-Ḫilāfa* (Baghdad: Gurguis ʿAwwād) 43.

[46] ḪAṬĪB AL-BAĠDĀDĪ, 11 (1931) 192.

[47] CLERMONT-GANNEAU, Ch. (1898) 47–51.

Ṣtafan[48]), Aramaic (Aṣtura,[49] Ibn Aṣṭān,[50] and Ibrāhīm al-Naṣrānī[51]), and Arabic signatures including a *kunya* (Abū Ḥassūn,[52] Abū Ṭālib,[53] Abū Ḫālid,[54] Abū Naṣr al-Baṣrī,[55] and Abū al-Farāǧ[56]) that were identified on metal, pottery, and glass artefacts may have certainly been those of free artisans or manumitted slaves.

Self-employed artisans in early Islam laboured independently and increasingly collectively.[57] Epigraphic evidence exists of artisanal partnerships, from two intact lamps stored in the Sabah collection in Kuwait and the Archaeological Museum of ʿAmmān dated to the early ʿAbbāsid dynasty. These multi-nozzle lamps, made in the late eighth century, have a horseshoe shape, a flat base, and a tongue handle at the rear. Four to five shallow channels connect the pouring hole and the nozzles. The outer two channels both carry the Arabic transcriptions of the Aramaic names of 'Aṣṭūrā' and 'Ibn Aṣṭān', the craftspersons who made the artefacts.[58]

Epigraphic sources also highlight the continuity of a familial mode of labour within free workers. They show that artisanal practices remained often transmitted from one generation to another within the family, and that artisans' relatives continued to be immersed in family business. An unglazed earthenware lamp dated to 823–4, from the Sabah Collection, indeed bears an inscription that reads 'ṣanaʿa-hu Muslim ibn Yazīd al-fuḫḫār bi-Ǧaraš ṯaman mā'itayn' (made by Muslim, son of Yazīd the potter, at Jarash in 208 of hijra).[59] Similarly, an Umayyad lamp found during a rescue excavation in Qafr Batna near Damascus bears an inscription referring to Badūr ibn sayyidī (badūr son of his master).[60]

A few individual craftsmen's signatures include the identity of the consumers, which highlights how self-employed artisans could both produce

[48] ʿAMR, ʿA., KHAIRY, N. I. (1986) 147.

[49] DAVIAU, M., BECKMANN, M. (2001) 264–5.

[50] ʿAMR, ʿA., KHAIRY, N. I. (1986) 150–1.

[51] GROHMANN, A., 2 (1971) table XIV, 2; FINSTER, B. (2003) 199–210.

[52] ʿAMR, ʿA. (1986b) 167. [53] SAUVAGET, J. (1948) 148–9.

[54] HERZFELD, E. (1925) 'Epigraphisches', in *Die Keramik von Samarra* (Berlin) 84, no. 183; (1973) *Islamische Keramik, Hetjens-Museum, Düsseldorf in Zusammenarbeit mit dem Museum für Islamische Kunst* (Berlin) 35, no. 23.

[55] Four artefacts inscribed with the name Abū Naṣr al-Baṣrī have been identified in Fusṭāṭ and Akhmim in Egypt, as well as in Sāmarrā in Iraq and al-Mīnā near Antioch. LANE, A. (1939) 59, 64–5; SARRE, F. (1925) *Die Keramik von Samarra, Die Ausgrabungen von Samarra* II (Berlin) 31, 82, no. 7; FOUQUET, D. (1900) *Contribution à l'étude de la céramique orientale* (Cairo) 125, pl. XV, no. 1.

[56] BAHGAT, A., MASSOUL, F. (1930) *La céramique musulmane de l'Égypte* (Cairo) 60, pl. XXII, nos. 7 and 7 bis.

[57] See Chapter 4 on the development of nucleated workshops in the Middle East and Central Asia, from the eighth century.

[58] ʿAMR, ʿA., KHAIRY, N. I. (1986) 150–1.

[59] WATSON, O. (2004) *Ceramics from Islamic Lands* (London: Thames & Hudson) 104.

[60] AL-KHOULY, M. (2001) 193–6.

artefacts for common necessities and the imperial elite. In 1948, the excavation of Raqqa, undertaken by Nasir Salibi and the Department of Antiquities in Damascus, led to the discovery of an early-eighth-century bowl with an inscription around its rim. It reads 'min 'amal Ibrāhīm al-Naṣrānī [ṣuni'a bi]-l-Ḥīra [li-]l-amīr Sulaymān ibn amīr al-mu'minīn' (made by Ibrāhīm the Christian in al-Ḥīra for the Prince Sulaymān son of the Commander of the Faithful).[61] A few pieces of inscribed fabric from the early ninth century, featuring the identity of the artisan and recipient, also confirm that 'Abbāsid rulers ordered garments from both caliphal factories, run by their clients or *mawālī*, and public workshops. Consequently, in those workshops, independent artisans produced for both the aristocracy and wider public, and the monopolistic privileges of late Roman and Sasanian court artisans may have thus not persisted after the rise of Islam.

1.3 Wage labour

In the early Middle Ages, wage labour, common in the Roman period, persisted and developed as the foundation of cities and military infrastructures depended on the seasonal employment of free artisans who combined their craft with other domestic or agricultural tasks. Carpenters, masons, blacksmiths,[62] and ironmongers were hired in times of war to build fortresses[63] and make shackles and arms (axes, armours, coats of mail, lances, swords, or catapults).[64] As noted by Steven Ashby,[65] 'itinerancy' was in reality rare because most craftsmen had a rural or urban home base and followed the army only on a seasonal basis to supplement their income. For instance in 766–7, when al-'Abbās and the partisans of the 'Abbāsid family moved to conquer southern Byzantine Asia Minor, many craftsmen from all Ğazīra were hired to make arms and mangonels to besiege the fortress of Qamḥ, on the Euphrates, north-east of Melitene.[66] As mentioned in the source, these

[61] GROHMANN, A., 2 (1971) table XIV, 2; B. FINSTER, (2003) 199–210.

[62] Al-ṬABARĪ [1879–1901] (1964) *Ta'rīḫ al-rusul wa al-mulūk*, Tertia Series, 2 (Leiden: De Goeje) 1263.

[63] For instance, in 833–4, al-Ma'mūn sent his son al-'Abbās to the Byzantine lands and ordered him to encamp at Ṭuwānah and to embark on a building programme there. He dispatched thither workmen and detachments of regularly paid troops. These artisans were charged to build a fortress occupying a mile square. Al-ṬABARĪ, Tertia Series, 2 [1879–1901] (1964) 1111.

[64] The chronicle of Zuqnīn confirms that these artisans were paid to march in with the army. HARRAK, A. (1999) *The Chronicle of Zuqnīn* (Toronto: Pontifical Institute) 215.

[65] ASHBY, S. P. (2015) 'With staff in hand, and dog at heel, what did it mean to be an "itinerant" artisan ?', in G. Hansen, S. P. Ashby, I. Baug (eds.) *Everyday Products in the Middle Ages. Crafts, Consumption and the Individual in Northern Europe c. AD 800–1600* (Oxford: Oxbow) 11–27.

[66] HARRAK, A. (1999) 207.

craftsmen were employed temporarily and were not travelling from village to village for opportunities and labour. Similarly, the construction-related artisans (brickmakers, masons, carpenters) may have maintained a home base and visited sites on a circuit, returning to their home on a seasonal basis. They were employed to dig canals, build towns[67] and fortifications, and repair or build bridges.[68] They were also recruited for constructing border forts, such as Melitene of Cappadocia[69] and Bāb al-Atrāk (Gate of the Turks). The Bāb al-Atrāk defended against Khazar invasions in the Caucasus and was built in 732 with *ūmānē* (craftsmen), *naggārē* (carpenters), and *qalāgrē* (labourers),[70] as indicated in the contemporary Syriac chronicle of Zuqnīn. These seasonally-hired craftsmen worked under supervisors, who were often recruited by Muslim rulers among their *mawālī* or close followers. For instance, when Umayyad prince Sulaymān b. ʿAbd al-Malik commissioned the foundation of the city of al-Ramla in Palestine before 717, Baṭrīq b. Nahā, a Christian Patriarch, held this office.[71] In the late eighth century, for the construction of Baghdad, ʿAbbāsid caliph al-Manṣūr also called in many craftsmen (masons, smiths, carpenters, marble-workers), who worked under the supervision of the rulers' engineers, such as the famous architect Ḥaǧǧāǧ ibn Arṭāt who built the congregational mosque.[72]

The rise of urban workshops equally generated huge demand for labour. Despite the scarcity of sources on the salaries and status of craftsmen and craftswomen, some observations can still be made. They were working on behalf of a single owner and no longer received piece-work wages, but a daily salary, most likely as a way to sedentarise the labour force. In the merchant-run textile Dār al-ḥawwākīn of Mosul in 752, skilled spinners, weavers and dyers were thus paid daily and laboured for the trader who was controlling and selling the product.[73] A similar organization of labour is reported in the

[67] For instance, the foundation of Baghdad would have required 100,000 craftsmen, including masons, carpenters, labourers, and blacksmiths. Al-YAʿQŪBĪ (1892) *Kitāb al-buldān* (Leiden: De Goeje) 238.

[68] HARRAK, A. (1999) 165. Zuqnīn mentions that in the years 742–3, all rivers swelled in Ǧazīra, especially the Tigris. The flood killed many people and ravaged countless places. Tall, heavy, and massive trees were carried away in it, in such a way that huge walnut trees became stuck against the large bridge beside Amida. Because of the trees and flood, the bridge collapsed. Caliph Hishām gathered labourers, craftsmen, and all the equipment to rebuild it.

[69] HARRAK, A. (1999) 201.

[70] HARRAK, A. (1999) 159. In the years 731–3, Maslama gathered a large crowd of craftsmen, carpenters, and labourers and prepared everything necessary for building. They went in and rebuilt the Gate of the land of Turks that he had torn down. For additional informations regarding the role and status of craftsmen in the army, see PETERSEN, L. I. R. (2013) *Siege Warfare and Military Organization in the Successor States (400–800 AD). Byzantium, the West and Islam* (Leiden: Brill) 401.

[71] Al-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 143.

[72] ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 70–1.

[73] AL-AZDĪ (1967) *Taʾrīḫ al-Mawṣil* (Cairo: Majlis al-aʿlā li-l-šuʾūn al-islāmiyyah) 135.

twelfth-century account of Michael the Syrian on linen workshops in the town of Tinnīs in Egypt around 825.[74] Artisans worked on consignments for merchants who provided the yarn needed and the tools, as well as administered the salaries. The report signals that the labour force included both men carding or weaving and women engaged in spinning. This distinction leads us to suppose that there was either a strict gender division of occupation or that the merchants operated a production nexus, which included the urban workshop and home female spinners.

This situation may have contrasted with late antiquity, as free wage labour was then mostly engaged where the activities were of a temporary nature carried out during part of the year only, or during a part of the worker's life (in the case of apprentices). When activities had a continuous character, slavery may have been mostly the rule.[75] Yet, this evolution in patterns of labour also meant a loss of independence for many craftsmen. A clear multiplication of collective workshop signatures on the underneath of Fatimid vessels,[76] woven fabrics, and glass, including the typical phrase 'mimmā jarā' (under the management of) have been identified, and show how artisans lost their title becoming no more than employees, while owners and employers designated themselves as craftsmen, without possessing artisanal skills.[77]

To respond to this increased wage labour demand, rural communities would have migrated to towns from the early eighth century. Persian, Nabatean, and Jewish labourers are said to have abandoned agriculture for crafts in early Islam.[78] Land taxes may have made agriculture unprofitable, whereas the economic vitality of Near Eastern cities offered a new opportunity to make a better living. This began after the Islamic conquest, when a large number of Mesopotamian peasants, whose towns and villages were destroyed, left their cultivable land and migrated to Kūfa in search of more lucrative employment.[79] The late-eighth-century historian Ibn Baḥšal also indicates that in the period 702-14, in south-western Iraq under the governor al-Ḥağğāğ, Nabatean communities left the countryside and migrated to Wāsiṭ for a more decent livelihood, abandoning agriculture to devote themselves to

[74] See Chapter 4 on textile production for more information on these Egyptian linen workshops.

[75] BANAJI, J. [2001] (2007) *Agrarian Change in Late Antiquity: Gold, Labour, and Aristocratic Dominance* (Oxford: Oxford University Press) 198–202.

[76] WATSON, O. (2006) *Ceramics from Islamic Lands* (London: Thames & Hudson) 280.

[77] This is reminiscent of the situation in the fourteenth-century private glass workshops of Provence and Languedoc. FOY, D. (2000a) 'Technologie, géographie, économie: les ateliers de verriers primaires et secondaires en Occident. Esquisse d'une évolution de l'Antiquité au Moyen Age', in *La route du verre*, coll. TMO 33 (Lyon: Maison de l'Orient et de la Méditerranée) 166.

[78] BOTTICINI, M., ECKSTEIN, Z. (2005) 'Jewish Occupational Selection: Education, Restrictions, or Minorities?', *The Journal of Economic History* 65(4): 922–48.

[79] AL-ṬABARĪ, Secunda Series 3 [1879–1901] (1964) 1750.

commerce.[80] The Jewish legal literature then illustrates a longer-term phenomenon of migration of Jewish labourers[81] to Baghdad from the late eighth century up to the tenth century. In Baghdad, they devoted themselves to production, commerce, and money lending, forming eventually a powerful community running mills, inns, public baths, olive presses, and ovens.[82]

2. CHANGING PATTERNS OF INSTITUTIONAL IDENTITY

While no clear rupture is perceptible in individual conditions of labour in the post-Roman world, the rise of Islam and Islamic jurisprudence prevented collectivization in the form of guilds. The disappearance of craft corporations constituted a remarkable shift from the late Roman[83] and Sasanian era,[84] when guilds formed powerful entities. After the fall of the western Roman Empire, their existence continued in medieval Europe.[85] By contrast, this organizational form of labour did not persist after the rise of Islam, although Muslims had exposure to the Roman institutional heritage. Islamic law borrowed from late Roman law directly as well as indirectly, through the indigenous communities who brought into Islamic discourse legal concepts with which they had familiarity. Nevertheless, classical Islamic law still recognized only natural persons and did not grant standing to corporate entities.[86] Consequently, existing corporations, as autonomous associations with a collective self-consciousness and identity, that could own property, elect representatives, have a collective life beyond the individual lives of their members, enter into contracts, and act as legal persons, disappeared during the first centuries of Muslim rule. Timur Kuran indicates that the emphasis put in the cohesion of the ʿ*umma* or Muslim community in the Qurʾān explains why all forms of independent, self-governing entities were in Islam strongly criticized.

[80] IBN BAḤŠAL (1967) *Taʾrīẖ Wāsiṭ* (Baghdad: Gurguis ʿawwād) 44–5.

[81] Before Islam, most Jews were engaged in agriculture, as reported in the account of the Jewish historian Flavius Josephus in the first century, as well as in the Mishna, the papyri, and Babylonian Talmud.

[82] MANN, J. (1919) 'The Responsa of the Babylonian Geonim as a Source of Jewish History', *The Jewish Quarterly Review* 10: 320–1.

[83] On the historiography of Roman associations, see PERRY, J. S. (2006) *The Roman Collegia: The Modern Evolution of an Ancient Concept* (Leiden: Brill).

[84] As early as the fourth century, the literary documents include reference to groups of artisans in Sasanian Iran, such as the hat-making, rope-making, and raw silks guilds in Nishapur. YAR-SHATER, E. (1982) *Encyclopaedia Iranica* 2/5–8: 773.

[85] KURAN, T. (2005) 'The Absence of the Corporation in Islamic Law: Origins and Persistence', *The American Journal of Comparative Law* 53–4: 788.

[86] KURAN, T. (2005) 788.

In addition, professions were henceforth backed by a centralized state capable of enforcing a unified law, and corporative entities were no longer required to facilitate the collection of taxes.[87]

While craft corporations with collective self-consciousness declined, epigraphic evidence suggests, nevertheless, that some sort of spontaneous associations of artisans may have still remained present in the post-Roman world. This finds an illustration in the stamp impressions found on many early Islamic jar handles across the Levant, which arguably represented the mark[88] of artisanal communities. The process of stamping jars was common since antiquity, the stamps constituting then official marks from royal or monastic workshops. Several late Roman jars stamped with Greek letters, cruciform monograms, crosses, or even the name of certain bishops have been excavated in the Levant and Greece.[89] Many were unearthed in the monasteries of Dominus Flevit[90] on the Mount of Olives in Jerusalem and Ramat Rahel[91] in late sixth- and seventh-centuries archaeological contexts. According to Lombardi,[92] these impressions represented the mark of the monasteries, although they could also have had an additional religious significance or indicate the jars' content.[93] These stamped marks therefore designated an institution or a group of individuals more than a single person.

In a similar way, it appears likely that in the eighth and ninth centuries, the stamped impressions on store-jar handles represented artisanal emblems. Among these symbolic marks were found floral design stamps in Ramla and

[87] The late Roman Empire could rid itself of the burden of tax collection by using the leading members of the guilds as their direct support, as well as maintaining an indirect control of the activity of the corporations.

[88] The stamps can also include Arabic inscriptions, specifically blessings granted to the owner of the jar. Examples have been found in Khirbat Burin [AMITAI-PREISS, N. (2006a) 'An Inscribed Handle from Khirbat Burin', *'Atiqot* 51: 221], Jerusalem [TUSHINGHAM, A. D. (1985) *Excavations in Jerusalem, 1961–1967* (Toronto) 327, fig. 35, no. 13], Caesarea [SHARON, M. (1999) *Corpus Inscriptionum Arabicarum Palaestinae II (B-C)* (Leiden) 292], and Khirbat Kaʿkul [AMITAI-PRESS, N. (2006b) 'An Inscribed Object from Khirbat Kaʿkul', in *Khirbat Kaʿkul: Early Roman Farmsteads and a Medieval Village*, 'Atiqot 54: 105].

[89] HAYES, J. W. (1971) 'A New Type of Early Christian Ampulla', *Annual of the British School at Athens* 66: 243–4, fig. 2, pls. 36–7.

[90] SALLER, S. J. (1957) *Excavations at Bethany (1949–53)* (Jerusalem) 216, pl. 123b: 3.

[91] AHARONI, Y. (1964) *Excavations at Ramat Rahel, Seasons 1961 and 1962* (Rome) fig. 9: 4, 5.

[92] LOMBARDI, G. (1956–7) 'Bolli byzantino-arabi al Dominus Flevit', *Liber Annuus* 7: 167–74, figs. 1,2,3:a–b, 4:a–b.

[93] Archaeological findings in the monastery of Dayr Samwīl have revealed dozens of Umayyad inscribed jar handles in Arabic, including blessings and place name (Dayr Samwīl), confirming that certain ecclesiastical institutions continued to use stamps as emblems of their workshops. MAGEN, Y. (2008) 'Oil Production in the Land of Israel in the Early Islamic Period', in Y. Magen (ed.) *Judea and Samaria: Researches and Discoveries* (Judea and Samaria Publications 6) (Jerusalem: IAA) 330–1, 335, pls. 1, 2; SHARON, M. (1996) 'Arabic Inscriptions from Caesarea Maritima: A Publication of the Corpus Inscriptionum rabicarum Palaestinae', in A. Raban, K. G. Holum (eds.) *Caesarea Maritima: A Retrospective after Two Millennia* (Leiden: Brill) 438–40.

a possible tree of life or seven-branched candelabra, found in Khirbet ʿAmra in the Negev,[94] Caesarea,[95] Khirbet Kafr Jinnis,[96] as well as Nesher Quarries in south-east Ludd,[97] in late Umayyad and early ʿAbbāsid domestic contexts. Interestingly, early Islamic storage jars with a stamped mark of a star with five, six, or sometimes eight points have also been discovered. This motif is known in Islamic art as 'King Solomon's Seal' (*ẖātam Sulaymān*). It was attributed to the concept of rule, but also known as a religious and magical symbol.[98] This particular motif was used in the Umayyad palace of Khirbet al-Mafjar,[99] along with other marks (crosses, circles, squares with a diagonal line) incised on stones. Dimitri Baramki suggests that they were masons' marks and a possible relic of embryonic forms of professional associations and communal identities.

Later historical testimonies not only confirm the plausible existence of associations of professional and religious nature, but also supplement this statement. They provide reason to believe that their members shared an *esprit de corps* and stood together when attacks occurred. Although the system of guilds disappeared, a corporate spirit was maintained among artisans, and materialized itself through their confraternal solidarity to protect common interests.[100] In Arabia, al-Ṭabarī reports that disputes between members from different trades could easily escalate and lead to fights between competing factions, as occurred between bathkeepers and salt merchants or butchers and tailors in Mecca in 876.[101] Similar anecdotes are later reported by Ibn al-Aṯīr,[102] who indicates that in 919 and 929 in Mosul, grocers and textile merchants opposed the shoemakers, or again that in 1205 violent struggles broke out in Herat between blacksmiths and boilermakers. There is no clear evidence that the nature of these fights was professional, and it is highly plausible that their origins were in fact religious. Nevertheless, historical

[94] TAHEL, G. (2000) 'Khirbet ʿAmra', *ESI* 20: 124.

[95] HACHLILI, R. (2001) *The Menorah, the Ancient Seven-Armed Candlebraum: Origin, Form and Significance* (Leiden: Brill) 110, 340.

[96] MESSIKA, N. (2006) 'An Early Islamic Site at Kafr Jinnis near Lod', *Salvage Excavation Reports* 3: 84–112. Stamped impressions on store-jar handles most likely early Islamic have been collected from topsoil layers in Kafr Jinnis in Palestine/Israel.

[97] TAXEL, I. (2009) 'Late Byzantine/Early Islamic Stamped Jar Handles from Jerusalem and Tell Qatra', *IEJ* 59(2): 191.

[98] TAXEL, I. (2009) 190.

[99] BARAMKI, D. C. (1936) *Excavations at Khirbet el-Mefjer*, coll. QDAP 5: 132–8.

[100] On the twentieth-century historiography on the issue of Islamic guilds, see LEWIS, B. (1937) 'Islamic Guilds', *Economic History Review* 8: 20–37; MASSIGNON, L. (1931) 'Guilds (Muhammadan)', *Encyclopaedia of Social Sciences*; (1952) 'La Futuwa ou pacte d'honneur artisanal entre travailleurs musulmans du Moyen-âge', *La Nouvelle Clio* 4/5(8): 171–98; CAHEN, C. (1977) 'Y a-t-il eu des corporations professionnelles dans le monde musulman classique? Quelques notes et réflexions', in C. Cahen (ed.) *Les peuples musulmans dans l'histoire médiévale* (Paris: Maisonneuve) 307–21.

[101] AL-ṬABARĪ, Tertia Series, 3 [1879–1901] (1964) 1908.

[102] IBN AL-AṮĪR (1965–7) *Al-Kāmil* (Beirut: Dār ṣādir) 89, 157.

evidence still confirms that the disappearance of corporations as cohesive entities with semi-independent legal standing did not prevent the persistence of private professional associations of artisans.

3. STATUS AND COMPOSITION OF THE LABOUR FORCE

While reinventing the institutional positioning of artisans, the spread of Islamic moral codes affected the composition of the urban labour force. The Islamic legal writing generated a new ethno-religious division of labour with Christians and Jews performing specific labour forbidden to Muslims or held in disdain because they were carried out in unpleasant conditions. This said, women's employment remained unaltered as they continued to act as vital economic agents in urban medieval communities.[103]

3.1 Disdained and tolerated professions

While physicians, jewellers, tailors, and skilled engineers, such as architects (*fa'alīn*), masons (*bannā'īn*), and carpenters (*naǧǧārīn*) could enjoy a high status, the craft professions carried out in unpleasant conditions or involving the shedding of blood were held in disdain in early Islam.[104] The encyclopedia *al-Qādirī fī al-ta'bīr*[105] of Dīnawarī, which offers a list of the main professions in tenth-century Baghdad, reveals how they suffered from a very negative reputation. Apart from a few exceptions,[106] they were considered as degrading and induced revulsion. One despised the profession of butcher (*al-ḏabbāh* or *qaṣṣāb*), because of the repulsion, guilt, and shame of animal slaughter, and the paramedical activities of ventosers or bloodletters (*al-fāṣid*[107] or *ḥaǧǧām*). Detailed descriptions of ventosers' duties that were mostly practised by

[103] In modern scholarship, working women have appeared as a marginal group in the late Roman world for a long time. However, recent studies demonstrate that they were professionally active in many branches of the urban economy. LARSSON LOVEN, L. (2016) 'Women, Trade, and Production in Urban Centres of Roman Italy', in A. Wilson, M. Flohr (eds.) *Urban Craftsmen and Traders in the Roman World* (Oxford: Oxford University Press) 200–21.

[104] IBN 'ALĪ AL-DIMAŠQĪ (1900) *Kitāb al-išāra* (Beirut: Maṭba'at al-mu'ayyid) 43.

[105] FAHD, T. (1965) 'Les corps de métiers au IVe/Xe siècle à Baġdād, d'après le chapitre XII d'*al-Qādirī fī al-ta'bīr* de Dīnawarī', *JESHO* 8(2): 186–212.

[106] BRUNSCHVIG, R. (1962) 'Métiers vils en Islam', *Studia Islamica* 16: 41–60.

[107] This term is used in MASĪḤ B. ḤAKAM AL-DIMAŠQĪ (2002) *Risāla al-Hārūniyya*, trans. S. Gigandet (Damascus: Ifpo) 192–3; KAZIMIRSKI (1974) *Dictionnaire Arabe-Français* 2 (Beirut: Librairie du Liban) 600.

barbers, rather than skilled physicians,[108] can be found in ninth- and tenth-century medical treatises.[109] They were bleeding and purging sick patients, and their profession was held in very low esteem because of the aversion to the shedding of blood. Bleeding usually occurred in the neck with a hollowed-out horn. In addition, there were negative perceptions of physically strenuous occupations, such as polisher (*ḥakkāk*), blacksmith (*ḥaddād*), caulker, woodcutter (*ḥaṭṭāb*), miner (*ḥaffār*), coal merchant (*faḥḥām*), wrecker (*naqqāḍ*), or dyer (*ṣabbāġ*), because they worked with their hands in unpleasant contexts. The ninth-century chronicler al-Dimašqī finally reports that the activities in relation to women and children, as bathkeeper (*ḥammāmī*), were seen as disreputable.[110] That these trades were carried out by Christians or Jews resulted from the stigma associated with them by the Muslim population and jurists.

This popular disdain for these professions was manifested verbally. Pejorative epithets were often used to designate them: for instance, 'son of adultery or prostitution' (*ibn al-laḫnā'*),[111] wretches (*awbāš*), or vagabonds (*safalat fā'īrūna*).[112] An anecdote from the tenth-century chronicle of al-Mas'ūdī can be used as evidence. It reports the revolt of Yazīd b. Muhallab, former governor of Ḫurāsān, under the late Umayyads in 720. It is said that when Caliph Yazīd II sent his army to contain the rebellion, Ibn Muhallab used intentionally unflattering descriptions of the sovereign's army to raise the allegiance of his own troops. As part of this propaganda, the caliph's army was compared to a vile hodgepodge of peasants, artisans, and vagabonds.[113]

Verbal assaults could be accompanied by violence, as reveals an account from al-Ṭabarī's chronicle about Medinese butchers. In the year 762, under the governorate of 'Abdallāh b. Rabī' and the reign of al-Manṣūr, butchers in Medina complained about having to undergo daily teasing and plundering from the soldiers that the caliph had sent to the Ḥiǧāz in the hope of overwhelming the rebellion led by the Zaydī brothers Muḥammad b. 'Abdallāh al-Nafs al-Zakiyya and Ibrāhīm. One of these butchers was the

[108] AL-MAS'ŪDĪ [1861–77] (1989) *Les prairies d'or* 7, trans. Ch. Barbier de Meynard, A. Pavet de Courteille (Paris: Société Asiatique) 69–70. Al-Mas'ūdī mentions a ventoser, which actually was primarily a barber. F. Sanagustin argues that, in contrast with western Europe, in the medieval Islamic world, up to the eleventh century, young physicians followed a practical training delivered by fully skilled doctors in hospitals. Although surgery constituted a duty of the physicians, most doctors were reluctant to practice bloodletting, as they could easily get a discredit if it did not succeed or led to the death of the patient. Therefore, like in the West, the physicians gave over to barbers this and other ministrations such as bloodletting, cupping and leeching, and treating wounds. This is strongly criticized by the ninth-century physician al-Rāzī. SANAGUSTIN, F. (1986) 'La chirurgie dans le canon de la médecine ('Al-Qānūn fi-ṭ-ṭibb') d'Avicenne ('Ibn Sīnā')', *Arabica* 33(1): 86–7.

[109] For instance, the ninth-century physician Masīḥ b. Ḥakam al-Dimašqī dedicates an entire chapter on bloodletting in his Risāla. MASĪḤ B. ḤAKAM AL-DIMAŠQĪ (2002) 188–93.

[110] IBN 'AlĪ AL-DIMAŠQĪ (1900) 43.

[111] AL-MAS'ŪDĪ, 6 [1861–77] (1989) 345.

[112] AL-MAS'ŪDĪ, 4 [1861–77] (1989) 454.

[113] AL-MAS'ŪDĪ, 4 [1861–77] (1989) 454.

victim of robbery and assault, and defended himself by killing his attacker.[114] The complaints brought to the governor ʿAbdallāh b. Rabīʿ did not succeed and the artisans could not do anything else but take strike action, closing their workshops and denouncing the governor's incompetence at the Friday prayer. This account sheds light on the physical abuse that disdained craftsmen suffered and that could lead to popular movements.

Physical abuse also meant stigmatization and marginalization. This can be inferred from a passage in al-Masʿūdī's chronicle regarding the empowerment and decline of the counter-caliph Ibrāhīm b. Mahdī in the ninth century.[115] When Caliph al-Ma'mūn lost the allegiance of the ʿAbbasīds and his descendants, after he had named the Shīʿī imām ʿAlī al-Riḍā his heir apparent, Ibrāhīm b. Mahdī, the sovereign's uncle, gained power and usurped the throne temporarily. In 819, al-Ma'mūn restored order in the capital and Ibrāhīm went into hiding. He was welcomed by a ventoser (*ḥaggām*) of Baghdad, who agreed to hide him for a night. It is said that the bloodletters provided Ibrāhīm with food as well as brand new pots and cooking dishes, because it would not have been appropriate for a ventoser with such a low social status to share his own utensils with a member of the elite.[116]

This hierarchy in artisanal professions was reflected in the salaries, daily incomes, and piece wages.[117] The average daily income of potters and glassmakers in the ninth century varied between half a dirham and a dirham as reported in the biographic dictionary of al-Samʿānī. When reporting the life of al-Mubarrad, a grammarian of the ninth century, al-Samʿānī relates that he met a glassmaker, whose daily income varied between half a dirham and a dirham plus a *dāniq* (one sixth of a dirham).[118] Similarly, in ninth-century Iraq, a coppersmith, working as an assistant in his master's workshop, earned half a dirham per day.[119] Metalworkers, as well as blacksmiths or polishers, could, according to Abū Ṭālib al-Makkī,[120] get a slightly better income, up to one dīnār or ten dirhams, its equivalent at that time. Unskilled building workers were also poorly paid. As suggests al-Ḫaṭīb al-Baġdādī, they were given a modest salary of one *qīrāt* to five *ḥabbas* of silver everyday (between two and four dirhams per month), whose rate was probably fixed according to

[114] AL-ṬABARĪ, Tertia Series [1879–1901] (1964) 266.

[115] COOPERSON, M. (2000) *Classical Arabic Biography. The Heirs of the Prophets in the Age of al-Ma'mūn* (Cambridge: Cambridge University Press) 31.

[116] AL-MASʿŪDĪ, 7 [1861–77] (1989) 69–70.

[117] See ASHTOR, E. (1969) *Histoire des prix et des salaires dans l'Orient musulman* (Paris: Touzot).

[118] AL-SAMʿĀNĪ (1962) *Kitāb al-ansāb* 6 (Hyderabad: Dā'irat al-maʿārif) 274.

[119] BARTHOLD, W. (1968) *Turkestan Down to the Mongol Invasion* (London: Oxford University Press) 238.

[120] ABŪ ṬĀLIB AL-MAKKĪ (1892) *Qūt al-qulūb* 2 (Cairo: al-Maymaniyya) 17.

the prevailing low price of food, during the foundation of Baghdad in 762–6.[121]

By contrast, skilled tailors, men of letters, and calligraphers were paid much more. In the early tenth century, a tailor designing a garment from expensive brocade fabric or *dībāǧ* could make up to a thousand dirhams per day, if we are to believe an account from al-Ṯaʿālibī.[122] In his description of Wāsiṭ, the chronicler Ibn Baḥšal also reveals that in the year 704 the calligrapher Musṭalim b. Saʿīd,[123] who had a shop in the local market, offered his services to illiterates, writing letters and official documents at their demand on parchment for a piece wage of two dirhams. The sources show thus that salaries, piece wages, and daily incomes could vary considerably depending on the profession and the area of specialization. Interesting comparisons can be made with the revenues of the privileged classes and the cost of living at that time. While artisans could get enough revenue to survive, their financial resources remained low and did not allow them access to property ownership.[124] Furthermore, artisans were part of a divided class. Although a few professions were rewarded, manual labour was generally considered fit only for the lowest level of the society.

3.2 Changing division of labour

The influence of Islamic moral codes on labour yielded a new ethno-religious division of economic roles. The professions closed to Muslim artisans, as they did not fit with Islamic beliefs, morals, honour, or good manners, became exclusively conducted by Christian and Jewish peoples. It became common to use non-Muslims for 'dirty work—not only the smelly and offensive work of tanning and fulling, but also the repulsive professions of barbers or butchers'.[125]

In the very late eighth century, we learn, for instance, from Abū Yūsuf in his *Kitāb al-Ḫarāǧ* that the lowest esteemed artisanal activities were usually given over to Jews. This is confirmed in the contemporary Christian polemic literature, such as in the accounts of the Arabic-speaking Palestinian monk Ibrāhīm al-Ṭabarānī, who lived around 800. The Jews' frequent low-grade professions as butcher, weaver, tanner, barber, potter, glassblower, largely

[121] ḪAṬĪB AL-BAĠDĀDĪ, 1 (1931) 366.

[122] AL-ṮAʿĀLIBĪ (1883) *Rasāʾil* (Istanbul) 27.

[123] IBN BAḤŠAL (1967) 93.

[124] BEG, M. A. J. (1972) 'A Contribution to the Economic History of the Caliphate: A Study of the Cost of Living and the Economic Status of Artisans of Abbasid Iraq', *Islamic Quaterly* 16/3–4: 140–67.

[125] Similarly, Ibn Qutayba suggests that under the governorship of Ziyād b. Abīhī in Baṣra at the end of the seventh century, the professions of butchers and bloodletters were almost exclusively practised by non-Muslims. IBN QUTAYBA (1960) *Kitāb al-maʿārif* (Cairo: Tharwat ʿUkāsha) 485.

disdained in the Islamic world, are made clear to emphasize their lack of honour and their low-class standing.[126] This image was later corroborated in the ninth and tenth centuries in al-Ǧāḥiẓ's *risāla* and the geography of al-Muqaddasī on Egypt and Syria. Both testimonies highlight the distribution of occupations in the medieval Islamic world and report that the professions of dyers, tanners, cuppers, butchers, and cobblers were often held by Jewish artisans, while most medical men and clerks were Christians.[127] This image was still later confirmed by Bar Hebraeus, who asserted that 'the humbler among [the Jews] were engaged as tanners, dyers or tailors'.[128] S. M. Wasserstrom demonstrates how their constant stigmatization and limited access to professions outside the mere manual labour and clothwork favoured their association with the originators of Shīʿī rebellions in the eighth and ninth centuries, as well as led them to revolt repeatedly against the Umayyad and ʿAbbāsid authority to denounce their underclass status.[129] For instance, one of these Jewish rebellions arose in Iraq around the year 720 and included Jews who were 'weavers, carpetmakers and launderers'.[130] Though this rebellion was quickly put down, others would soon to follow. A major one was notably led by the Jewish clothworker from Nisibis Abū ʿĪsā al-Iṣfahānī. The tenth-century biographer and exegete Yaʿqūb al-Qirqisanī says that Abū ʿĪsā was 'an ignorant tailor who could neither read nor write', which means another illiterate clothworker.[131] His movement was massive, meaning that the rebel most likely appealed to his underclass status in his uprising. Goitein suggests that his movement, the ʿĪsāwiyya, was at least symbolically responsible for the decline of Jewish village life in the eighth century.[132]

Similarly, as early Muslims' involvement in financial affairs was limited by the opposition of the Islamic doctrines to interest loans, the emerging ʿAbbāsid banking system before 950 came to be the domain of Jewish financiers,[133] such as the famous Joseph b. Phineas and Aaron b. Amran. Both are repeatedly

[126] VAJDA, G. (1967) 'Un traité de polémique christiano-arabe contre les Juifs attribué à Abraham de Tibériade', *Bulletin d'information de l'Institut de Recherche et d'Histoire des Textes* 15: 137–50.

[127] AL-ǦĀḤIẒ (1927) '*Al-Radd ʿalā al-Naṣārā*', trans. J. Finkel, *JAOS* XLVII: 327–8; WASSERSTROM, S. M. (1995) *Between Muslim and Jew. The Problem of Symbiosis Under Early Islam* (Princeton: Princeton University Press) 21–3; AL-MUQADDASĪ (1877) *Aḥsan al-taqāsīm fī maʿrifat al-aqālīm* (Leiden: De Goeje) 183.

[128] VAJDA, G. (1967) 147; FISCHEL, W. (1937) *Jews in the Economic and Political Life of Mediaeval Islam* (London: The Royal Asiatic Society) 106.

[129] WASSERSTROM, S. M. (1995) 22.

[130] BARON, S. W. (1952–83) *A Social and Religious History of the Jews* 5 (New York: Columbia University Press) 184.

[131] AL-QIRQISANĪ (1984) *Yaʿqūb al-Qirqisanī on Jewish Sects and Christianity*, trans. B. Chiesa and W. Lockwood (Frankfurt: Peter Lang) 103.

[132] GOITEIN, S. (1955) *Jews and Arabs* (New York: Schocken Books) 169.

[133] FISCHEL, W. (1937) 106.

mentioned in the tenth-century *aḫbār* collections on court life of al-Tanūḫī[134] and Ibn Miskawayh[135] as court bankers or *ǧahbaḏān al-yahūdiyyān* and merchants or *tuǧǧār*. They administered, procured, and supplied money for the government—most likely during the reign of Caliph al-Muqtadir. After their appointment, they remained in continuous contact with the court until 923, which coincided with the dismissal of the vizier Ibn al-Furāt in 924, who had been their most influential patron.[136]

Moreover, certain professions, which required special knowledge, were the domain of specific cultural and ethnic groups. For instance, it is reported that many Christian workers were recruited by Muslim leaders to make works of art in early Islam. The exploitation of Christian artisans is mentioned in the first half of the seventh century, when the Prophet had a seal made by the Christian monk and artisan Tamīm al-Dārī,[137] who then embraced Islam, or when Buqtur, who was the carpenter of the Nubian Christian king, was asked by ʿAmr b. al-ʿĀṣ to build a minbar for the mosque in Fusṭāṭ in 641–2.[138] The regular requisition of Coptic carpenters, caulkers, and ironsmiths by Muslim officials is evident in the Aphrodito papyri of early Islamic Egypt, illustrating how these professions, disdained by Muslim jurists, consequently anchored into the daily life of the Coptic community.[139] Many of them, concentrated at Babylon, were actively involved in shipbuilding in the early eighth century. Christian artisans in the first centuries of Islamic rule continued to spin and weave the finest textiles, as well as make simple and more sophisticated housewares, as illustrated by their signatures found on ceramics.[140]

3.3 Female artisans

The study of women's professional role reveals that female labour remained constant in the post-Roman world. Roman epigraphic sources indicate that women were already active in several occupational sectors. They could be

[134] AL-TANŪḪĪ (1930) *Nišwār al-muḥāḍarah wa aḫbār al-muḏākarah* 2 (Damascus: al-Maǧma al-ʿilmī al-ʿarabī) 81–5.

[135] IBN MISKAWAYH (1920) *Kitāb al-Tajārib al-Umam*, trans. Amedroz and Margoliouth (Oxford: Basil Blackwell) 44, 66, 129.

[136] GIL, M. (2004) *Jews in Islamic Countries in the Middle Ages* (Leiden: Brill) 638.

[137] SHALEM, A. (2004) 'Tamīm al-Dārī: A Portrait of Him as the First Muslim Artisan', *Oriente Moderno* 84/2: 507–15.

[138] CRESWELL, K. A. C. (1969) *Early Muslim Architecture* (Oxford: Clarendon Press) 41; BEHRENS-ABOUSEIF, D. (1989) *Islamic Architecture in Cairo* (Leiden: Brill) 49.

[139] TROMBLEY, F. R. (2004) 'Sawīrus Ibn al-Muqaffa and the Christians of Umayyad Egypt: War and Society in Documentary Context', in P. Sijpestejn, L. Sundelin (eds.) *Papyrology and the History of Early Islamic Egypt* (Leiden: Brill) 214.

[140] CLERMONT-GANNEAU, Ch. (1898) 'Le lychnarion arabe de Djerach', *Recueil d'Archéologie Orientale* 2: 47–51. ʿAMR, ʿA., KHAIRY, N. I. (1986) 147.

in charge of large estates, as well as be weavers, tailors, seamstresses, washwomen, or fishmongers in late antique towns. Nevertheless, the most frequent inscriptions describe their occupation in trade connected with making and repairing clothing.[141] Roman relief carvings outside stores and on temples and funerary sites include additional references to female labour as hairdressers, textile producers, and metalworkers.

The rise of Islam did not lead to the confinement of women at home. Historical, as well as material evidence, suggests that women continued to be involved in a wide range of commercial and productive activities in the Umayyad and early ʿAbbāsid caliphates. By way of contrast, this constituted a significant difference with early medieval Europe, where the guilds 'imposed severe restrictions on women's work',[142] as demonstrated by David Herlihy. It can be argued that women certainly had a minor involvement in large-scale trade and commerce. The only testimonies we have suggest that those living in rural areas could sell in markets foodstuffs from ingredients produced in their agricultural domains, such as oil. A ninth-century papyrus, for example, mentions women producing and selling linseed and radish oil in Egypt.[143] In the urban environment, female pedlars, mentioned in ninth-century Baṣra by al-Ǧāḥiẓ, would also sell basic food commodities, such as flour, oil, or vegetables.[144] Apart from very basic commercial activities, women could be used for administrative duties,[145] perform a mixture of productive and household tasks, or be employed in urban workshops.

In production, women's involvement was mainly concentrated in two sectors of the economy: textile and food. Although fragmentary and scattered, the accounts related to the activity of spinning flax, cotton, wool, or silk define them as being performed most often, but not exclusively, by female labour.[146] This is confirmed in the description of Egyptian linen workshops in 825 reported by Michael the Syrian.[147] Furthermore, the ninth-century author

[141] ABBOTT, F. F. (1909) *Society and Politics in Ancient Rome: Essays and Sketches* (New York: Scribner's) 45–51, 96–9; SPENCER-WOOD, S. M. (2007) *Women in Antiquity: Theoretical Approaches to Gender and Archaeology* (Lanham: Altamira Press) 277.

[142] HERLIHY, D. (1990) *Opera Muliebria: Women and Work in Medieval Europe* (New York: McGraw-Hill) 186.

[143] GROHMANN, A. (1952) *From the World of Arabic Papyri* (Cairo: al-Maaref Press) 154.

[144] AL-ǦĀḤIẒ (2012) 42–3; (1951) 42–3.

[145] TILLIER, M. (2009) 'Women before the Qāḍī under the Abbasids', *Islamic Law and Society* 16, 3–4: 285–7. M. Tillier demonstrates that the *qāḍī*'s court was not reserved exclusively for men. The literary sources from 750 to 945 reveal that many familial matters compelled the judge to use female auxiliaries. For instance, the help of female judicial experts was required in cases related to women's virginity and pregnancy, or involving female slaves. When a defendant (male or female) refused to appear in court and hid at home, women judicial experts, who could enter both the private and female space of the household, were sent to enter the house, drive away its female inhabitants, and look for the defendant. This indicates that women played in the early ʿAbbāsid era a significant administrative role as auxiliairies in the *qāḍī*'s court.

[146] On women's involvement in spinning activities, see SERJEANT, R. B. (1978) *Les textiles dans le monde musulman, VIIe-XIIe siècle* (Paris: La Haye) 225.

[147] See Chapter 4 on textile production.

al-Ǧāḥiẓ indicates that many women in Baghdad were spinning cotton from home. A textile dealer could commission their work. Otherwise, women worked and marketed their products in the privacy of their household.[148] In the food industry, women were millers[149] (*daqqāqa* or *taḥḥāna*) and could make vinegar,[150] according to the ninth-century *diwān* of Ibn al-Rumi and the early-tenth-century collection of songs written by al-Iṣfahānī. Additionally, women could perform services to other women, in particular hairdressing.[151] Material testimonies of female work are meagre, however, to confirm the literary documents and bring additional nuances. Nevertheless, the excavation of the Umayyad mansion of al-Faddayn in 1986 has delivered a collection of luxury household objects—a bronze and iron brazier, an incense burner, various ivory artefacts, ten glass bottles, two bronze moulds, and ten decorated steatite containers—some of them inscribed in Arabic with a female maker's name.[152] Although these are unique examples, they confirm the diversity of professional activities women could perform and their degree of artisanal specialization.

A greater reliance on epigraphic data can therefore add significant nuance to our understanding of the life and conditions of labour of local producers. Generally, we observe that the eighth and ninth centuries witnessed changes, sometimes ruptures, in the conditions and institutional framework surrounding artisanal labour. Although the involvement of slaves in the urban economy persisted after the rise of Islam, it is possible that there was a relative eschewing of this source of labour input in the urban centres of the early Islamic caliphate, as slaves from Africa and eastern Europe came to be used more extensively in agriculture and pastoralism during the Umayyads and early 'Abbāsids,[153] to drain the saline marshes of southern Iraq and resuscitate the agricultural lands. By contrast, there was a persistence of self-employment and

[148] AL-ǦĀḤIẒ (1935) *Kitāb al-tabaṣṣur bi-l-tiǧāra* (Cairo: H. A. al-Tunisi) 25–34. This is later confirmed in tenth-century Iraq by al-Ḫaṭīb and in Egypt in the Geniza documents. AL-ḪAṬĪB AL-BAĠDĀDĪ, 3 (1931) 250; 7: 75; 12: 164; 14: 244, 436. GOITEIN, S. D. (1999) *A Mediterranean Society: the Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza* 1 (Berkeley: University of California Press) 128.

[149] ABŪ AL-FARAǦ 'ALĪ AL-IṢFAHĀNĪ (1927–74) *Kitāb al-aġānī* 11 (Cairo: dār al-kutub al-'arabīyah) 254.

[150] GUEST, R. (1944) *Life and works of Ibn al-Rumi* (London: Luzac & Co.) 25, 91. The involvement of women in the food industry is later also attested in the Geniza documents. GOITEIN, S. D., 1 (1999) 129.

[151] FAHD, T. (1965) 'Les corps de métiers au IV/Xe siècle à Baghdad d'après le chapitre XII d'al-Qādirī fī ta'bīr de Dīnawarī', *JESHO* 8: 186–212.

[152] FOWDEN, G. (2004) *Quṣayr 'Amra. Art and the Umayyad Elite in Late Antique Syria* (Berkeley: University of California Press) 154; HUMBERT, J.-B. (1989) 'El-Fedein/Mafraq', in *Contribution française à l'archéologie jordanienne* (Amman: Ifpo) 125–31; (1986) 'El-Fedein/Mafraq', *Liber Annuus* 36: 354–8.

[153] TALBI, M. (1981) 'Law and Economy in Ifriqiya (Tunisia) in the Third Islamic Century: Agriculture and the Role of Slaves in the Country's Economy', in A. Udovitch (ed.) *The Islamic Middle East, 700–1900: Studies in Economic and Social History* (Princeton: Darwin Press) 209–50; CLARENCE-SMITH, W. G. (2006) *Islam and the Abolition of Slavery* (London: Hurst & Co.) 4.

a continued development of wage labour. Furthermore, the rise of Islam generated the abandonment of the institution of corporation, in the context of a new sociopolitical ideology emphasizing the cohesion of the *ʿumma* to the detriment of self-governing entities. However, in practice, material and textual sources confirm the persistence of collective professional identities. Islam also played a role in reshaping the division of labour, as the introduction of Islamic moral codes in artisanal life prevented Muslim artisans performing specific activities. Generally, the continuous disdain for craft labour prevented the rise of the artisans' social status, compared to the merchants, who came to increasingly form a politically empowered elite in the ninth century.

9

Twilight of the Clerical and Landowning Elite, Rise of *Tuǧǧār*

In the late Roman coastal cities of North Africa and the Levant, where wealth was not necessarily based only on the productivity of land, Jairus Banaji[1] and Harry Pleket[2] indicate that merchants could rise to prominence in their *civitates*. Ashkelon and Gaza were, for instance, well known for their 'wealthy businessmen', who pursued an active urban investment policy in late antiquity. At Carthage, they dominated the northern quarter of the harbour. Yet, urban retailers enjoyed only limited political influence. In most late Roman cities of the Near East, the clergy, landowners, and a new bureaucratic aristocracy[3] constituted the ruling elites after the disappearance of the *curiales* from the sixth century.[4] They increasingly ran local affairs and exercised patronage, as evidenced in Seleukia[5] and Thessalonika[6] in Asia Minor, Emesa,[7] and Bet She'an[8] in the late antique Levant. The traditional view is

[1] BANAJI, J. (2012) 'Economic Trajectories,' in S. F. Johnson (ed.) *The Oxford Handbook of Late Antiquity* (Oxford: Oxford University Press) 597–624.

[2] JONES HALL, L. (2001) 'The Case of Late Antique Berytus: Urban Wealth and Rural Sustenance. A Different Economic Dynamic', in Th. S. Burns, J. W. Eadie (eds.) *Urban Centers and Rural Contexts in Late Antiquity* (East Lansing: Michigan State University Press) 63–76; PLEKET, H. W. (1994) 'The Roman State and the Economy: The Case of Ephesus,' in J. Andreau et al. (eds.) *Économie Antique: Les échanges dans l'Antiquité: le rôle de l'État* (Saint-Bertrand-de-Comminges: Musée Archéologique Départemental) 115–26.

[3] For more on the emergence of a new aristocracy of bureaucratic origin in fifth-century Egypt and Syria, see BANAJI, J. (2012) 597–624; SARRIS, P. (2010) *Economy and Society in Age of Justinian* (Cambridge: Cambridge University Press) 208–9.

[4] WHITTOW, M. (1990) 'Ruling the Late Roman and Early Byzantine City: A Continuous History', *Past and Present* 129: 3–29.

[5] DAGRON, G. (ed.) (1978) *Vie et miracles de Sainte Thècle*, coll. Subsidia hagiographica, IXII (Brussels) 126.

[6] LEMERLE, P. (1979–81) *Les plus anciens recueils des miracles de saint Démétrius* 2 (Paris) 32–4, 36–44, 57–67, 94–5, 98, 119, 126, 146, 161–2.

[7] LEONTIOS DE NEAPOLIS (1974) *La vie de Syméon le fou et vie de Jean de Chypre*, trans. A. J. Festugère, L. Rydèn (Paris) 2–9, 79–85, 88–100.

[8] TSAFRIR, Y., FOERSTER, G. (1997) 'Urbanism at Scythopolis-Bet Shean in the fourth to seventh centuries', *DOP* 51: 100–1, 106, 108, 115–16. The authors mention that a powerful urban aristocracy and religious elite dominated the city from the late fourth century. The involvement

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard, Oxford University Press (2020). © Fanny Bessard.
DOI: 10.1093/oso/9780198855828.001.0001

that these 'leading citizens' drew on income from agriculture. In the late Sasanian Empire, Touraj Daryaee[9] argues that the merchants' participation in politics was also severely limited. The Persian world was characterized by an extraordinarily high volume of commercial exchange and a sizeable merchant community, mainly Sogdians and Manicheans.[10] However, as Richard Payne suggests,[11] priests, warriors, and landowners were responsible for the well-being of the Zoroastrian population.

After the Muslim conquests, the late antique clerical and landowning elite continued to occupy prominent positions in the administration of provincial cities in the Umayyad Near East, although their political involvement began to diminish from the late eighth century in Syria and Iraq.[12] Hugh Kennedy has demonstrated that the rise of the Barmakids from 765 paved the way for the empowerment of a new civilian class of bureaucrats.[13] Matthew Gordon has shown that, after the disorder of the civil war of 865–6 across ʿAbbāsid territories, a new political elite also arose from the military ranks.[14] In this research, I seek to refine the picture of a hierarchy that underwent complex changes through the emergence of new constituents.

The favours and protection that merchants benefited from under the rule of Umayyad and ʿAbbāsid caliphs were key factors in the development of their trade and, in some cases, their becoming entrepreneurs: *tuǧǧār*. While the term *tāǧir* (pl. *tuǧǧār*) is often translated by the generic term 'merchant',

of Christian leaders in municipal affairs became significant after the earthquake of 363. The metropolitan bishop of the province of Palaestina Secunda patronized the refurbishment of many buildings, according to an inscription on a large limestone slab found near the theatre. In the fifth and sixth centuries, in particular during the reign of Anastasius and Justin I, the local aristocracy undertook many building activities, from the paving of a new section of the street that abutted the amphitheatre on the north, to the foundation of the Byzantine agora, bathhouse, and new water installations.

[9] DARYAEE, T. (2010) 'Bazaars, Merchants, and Trade in Late Antique Iran', *Comparative Studies of South Asia, Africa and the Middle East* 30(3): 404.

[10] DE LA VAISSIERE, E. (2002) *Histoire des marchands sogdiens* (Paris: Collège de France) 257–88; MARSHAK, B. (1994) 'Le programme iconographique des peintures de la "Salle des ambassadeurs" à Afrasiab (Samarkand)', *Arts Asiatiques* 49: 5–20; GRENET, F. (1996) 'Les marchands sogdiens dans les mers du Sud à l'époque préislamique', *Cahier d'Asie Centrale* 1–2: 65–84.

[11] PAYNE, R. (2015) *A State of Mixture. Christians, Zoroastrians, and Iranian Political Culture in Late Antiquity* (Oakland: University of California Press) 41.

[12] ABŪ SAʿĪD ʿABD AL-ḤAYY GARDĪZĪ (2011) *Zayn al-aḫbār*, E. Bosworth (ed.) (London: I.B. Tauris) part three, n. 85. In the Ḫurāsān under the Samanids, the noble families of landowners remained indeed closely involved in the administration. For instance, Gardīzī mentions in his chapter on the Samanids the prominent role of the Mīkālī family, who descended from the pre-Islamic nobility of Samarkand, and served the Samanids as well as the early Ghaznavids in administrative and secretarial posts.

[13] KENNEDY, H. (1990) 'The Barmakid Revolution in Islamic Government,' *Pembroke Papers* 1: 89–98.

[14] KENNEDY, H. (2004a) 'The Decline and Fall of the First Muslim Empire,' *Der Islam* 81(1): 19; GORDON, M. (1999) 'The Turkish Offices of Samarra: Revenue and the Exercise of Authority,' *JESHO* 42(4): 473.

tuǧǧār were a very specific kind of trader, and had no connection with retail. Shlomo Goitein argues that they formed a 'bourgeoisie' in Syria, Iraq, and Iran from the early ninth century.[15] In his influential paper on 'The rise of the Near-Eastern Bourgeoisie in early Islamic Times', Goitein traces its appearance to between the middle of the seventh century and the end of the eighth, until it emerged more definitely during the ʿAbbāsid era. An emphasis was put on the role of *tuǧǧār* in the development of Muslim religious law, which was further developed in 1962 by Hayyim Cohen.[16] However, according to Goitein, they never formed a politically empowered community.[17]

This research seeks to reopen the debate on the social identity and culture of this community from the late Umayyads to 950. It discusses how certain traders became *tuǧǧār,* and the mechanisms by which these came to constitute collectives of individuals, sharing identities and practices.[18] It further explores the confrontation and collaboration between these enriched entrepreneurs and the aristocracy, as well as the translation of the growing political awareness of this community into practical action. The chapter argues that *tuǧǧār* became great supporters of the ʿAbbāsid caliphs from 800, and were more actively involved in the administration of the Empire than Goitein proposes.[19] Their penetration into the Islamic government was gradual, moving first to advisers up to viziers later on. In return for the financial and political support they provided to the authorities, they were able to claim social privileges and use their positions to defend their interests. When exploring the transition from the feudal to capitalist order in Germany after 1830, Andreas Dorpalen argues that it was marked by a 'class compromise', rather than the violent transfer of political power from the nobility to the bourgeoisie, as in France in the late eighteenth century.[20] A similar picture emerged in the ninth- and tenth-century Near East. Although the formation of a mercantile elite disrupted the established social and political patterns of the ʿAbbāsid society, a 'class compromise' was struck as their interests converged to some extent with those of the caliphs.

Literary testimonies are scarce on the life and daily activities of merchants in early Islam. From the Umayyad period, we possess a dozen Arabic

[15] GOITEIN, S. D. (1966) 'The Rise of the Middle-Eastern Bourgeoisie in Early Islamic Times,' in *Studies in Islamic History and Institutions* (Leiden: Brill) 217–41.

[16] COHEN, H. J. (1970) 'The Economic background and the secular occupations of Muslim jurisprudents and traditionists in the classical period of Islam (until the middle of the eleventh century),' *JESHO* 13: 16–61.

[17] BOURDIEU, P. (1987) 'What Makes a Social Class? On the Theoretical and Practical Existence of Groups', *Berkeley Journal of Sociology* 32: 1–17.

[18] DEVINE, F. (1998) 'Class Analysis and the Stability of Class Relations', *Sociology* 32: 23–42; DEVINE, F., SAVAGE, M. (2000) 'Conclusion: Renewing Class Analysis', in R. Crompton, F. Devine, M. Savage, J. Scott (eds.) *Renewing Class Analysis* (Oxford: Blackwell) 184–99.

[19] GOITEIN, S. D. (1966) 218.

[20] DORPALEN, A. (1985) *German History in Marxist Perspective, the East German Approach* (London: I.B. Tauris) 168–70, 192–203.

shopkeepers' accounts written on marble slabs, most of them unfortunately barely legible, that were discovered in a *sūq* in Jarash,[21] and one on ceramic from Evrona in the Negev.[22] From the ʿAbbāsid period, the epigraphic evidence on urban and travelling traders, mercantile law and habitus is certainly richer. It includes hundreds of commercial letters and contracts on papyri, mostly dating from the ninth and tenth centuries. Numerous business letters, unearthed in the Fayyūm in Egypt, have been published by Yūsuf Rāġib,[23] illustrating the living patterns and commercial habits of the Banū al-Mu'minīn family in the ninth century. This is a substantial and illuminating collection, alongside later Judeo-Arabic business documents from the Cairo Genizah.[24] However, the interpretation of these papyri requires a high degree of scholarly competence and patience. Alongside these papyrological data, the archaeological remains of wealthy traders' houses, described in ninth- and tenth-century Arab sources, have been excavated in early Islamic ports and *emporia*, such as ʿAqaba and Sīrāf. They provide evidence of the living arrangements of this mercantile elite in early Islam, as well as the socio-spatial dialectic between domestic and retail areas. Epigraphic and material data thus provides valuable insights on traders in the early caliphate, which are however difficult to interpret. Pictorial representations of traders do exist, but were produced much later from the twelfth century onwards.

Additional information has therefore been gleaned from Arabic manuscripts from the ninth and tenth centuries, beginning with dynastic histories and *aḫbār* collections, which were short stories on court life.[25] The *aḫbār* collections of Ibn Qutayba (d. 889),[26] Tanūḫī (d. 994),[27] al-Ṣūlī

[21] BESSARD, F. (2008) 'Arabic Shopkeepers' Accounts from Islamic Jarash', *ADAJ* 52: 122–6.

[22] AVNER, U., MAGNESS, J. (1998) 'Early Islamic Settlement in the Southern Negev', *BASOR* 310: 48.

[23] RĀĠIB, Y. (1991) 'La plus ancienne lettre arabe de marchand', in *Documents de l'Islam médiéval, nouvelles perspectives de recherche* (Cairo: Institut Français d'Archéologie Orientale) 2–9; (1988) 'Marchands d'Égypte du VIIe au IXe siècle d'après leur correspondance et leurs actes', in *Actes des congrès de la société des historiens médiévistes de l'enseignement supérieur public* (Reims) 25–33; (1982–96) *Marchands d'étoffes du Fayyoum au IIIe/IXe siècle d'après leurs archives (actes et lettres)* vol. I (Cairo, 1982), vol. II (Cairo, 1985), vol. III (Cairo, 1992), vol. V/1 (Cairo, 1996); VANTHIEGHEM, N. (2014) 'Les archives des marchands d'étoffes du Fayoum revisitées I. Un nouveau *ḏikr ḥaqq* du marchand Abū Hurayra', *Archiv für Papyrusforschung* 60/1: 212–17.

[24] The Cairo Genizah documents have not been used extensively in this research, as they were mostly produced in the eleventh and twelfth centuries. They contain many references to travelling merchants, lodging houses, and commercial practices. KHAN, G. (1992) *Arabic Papyri: Selected Material from the Khalili Collection* (Nour Foundation, Azimuth Editions).

[25] AL-MASʿŪDĪ (1861–77) *Murūǧ al-ḏahab*, trans. B. De Meynard, C. Pavet de Courteille (Paris: Imprimerie impériale); AL-ṬABARĪ [1879–1901] (1964) *Ta'rīḫ al-rusul wa al-mulūk* (Leiden: De Goeje).

[26] IBN QUTAYBA (1925) *Kitāb ʿuyūn al-aḫbār* 1 (Cairo: Dār al-kutub al-misriyyāt).

[27] AL-TANŪḪĪ (1922) *Nišwār al-muḥāḍara wa-aḫbār al-muḏākara*, D. S. Margoliouth (ed.) (London: The Royal Asiatic Society).

(d. 946),[28] and al-Ǧahšiyārī (d. 942)[29] dedicated to viziers were produced by bureaucrats and have a value as sources for the social history of the early ʿAbbāsid era. They offer anecdotes on the ruling classes in the Mašreq. These include many references to the living habits of *tuǧǧār*, their interactions with the political and religious authority, as well as how they defined themselves individually and collectively, according to their occupational specialization, regionality, or religious affiliation. Similar insights have been gathered in the collections of urban stories, sometimes satirical, of the ninth and tenth centuries. The *Kitāb al-Buḫalā'* of al-Ǧāḥiẓ (d. 868) contains plenty of 'evidence' on Basran traders.

1. RETAILERS AND TRADERS BEFORE 800

Literary sources describe the uninterrupted trading ventures of Jewish and Christian merchants under the Umayyads. Jewish markets are mentioned across Palestine, in Jerusalem, Ramla, and Tiberias,[30] as well as in Iraq, where the Jewish community was substantial.[31] From that time, we also have the earliest evidence regarding the Jewish Rādhānite trading diaspora, in a fragment of a commercial letter of 713 written in Judeo-Persian that was discovered in western China.[32] Alongside Jews, Christian communities in the Near East remained actively engaged in commerce. Monasteries sold wine[33] and handicrafts,[34] and Christian fairs were popular occasions to trade. They were associated with the commemoration of Christian saints; the treatise of Adamnanus in 697, *De Locis Sanctis*, which reports the visit of the Frankish bishop Arculfus to the Holy Land *c.*670 during the reign of the

[28] AL-ṢŪLĪ (1935) *Aḫbār al-Rāḍī billāh wa al-Muttaqī lillah*, J. H. Dunne (ed.) (Cairo); (1946) *Histoire de la dynastie abbasside de 322 à 333/934 à 944*, trans. M. Canard (Algiers: Publication de l'Institut des études orientales); see SOURDEL, D. (1955–7) 'Fragments d'al-Ṣūlī sur l'histoire des vizirs 'abbāsides', *BEO* 15: 99–108.

[29] AL-ǦAHŠIYĀRĪ (1965) *Kitāb al-wuzarā' wa al-kuttāb* (Beirut: Dār al-Kitāb al-Lubnānī).

[30] GIL, M. (1992) *History of Palestine, 634–1099* (Cambridge: Cambridge University Press) 241.

[31] GIL, M. (2004) *Jews in Islamic Countries in the Middle Ages* (Leiden: Brill) 296; Ibn QUTAYBA (1925) *ʿUyūn* 1: 344; PELLAT, C. (1953) *Le milieu baṣrien et la formation de Ǧāḥiẓ* (Paris: Librairie d'Amérique et d'Orient, Adrien-Maisonneuve) 234; GIL, M. (1976) *Documents of the Jewish Pious Foundations from the Cairo Geniza* (Leiden: Brill) no. 23, 30.

[32] GIL, M. (2004) 296.

[33] MAGEN, Y., DADON, M. (2003) 'Nebi Samwil (Montjoie)', in G. C. Bottini et al. (eds.) *One Land—Many Cultures; Archaeological Studies in Honour of Stanislao Loffreda* (Jerusalem: Franciscan Printing Press) 123–38. Grain and wine jars dated to the early eighth century, stamped with the seal of the monastery of Nebi Samwil, have been uncovered across Palestine.

[34] HARRAK, A. (1999) *The Chronicle of Zuqnīn, Parts III and IV* (Toronto: Pontifical Institute of Mediaeval Studies) 192. Zuqnīn mentions the monk Isaac of the monastery of Qartmīn in Ǧazīra, who was practising alchemy of silver and gold during the reign of al-Manṣūr.

Umayyad caliph Muʿāwiya, reveals that these fairs were perpetuated after the rise of Islam.[35] In his memoirs, Arculfus indicates, as reported by Adamnanus, that he remained nine months in Jerusalem, where he attended the yearly fair on the 15th of September.[36] While taking no notice of the religious festival, he emphasizes the economic significance of the fair that attracted foreign and local pilgrims, as well as pedlars, over several days.[37] Although the historicity of this source has been challenged and the account cannot be taken as an eyewitness testimony but a later translation of Arculfus' words,[38] the narrative that the coming of Islam did not disrupt the common modus operandi of Christian merchants and fairs in the Near East is most probable and appears in many other accounts.

The rise of Islam resulted, however, in the growing involvement of Arab elites in urban trade alongside their official administrative duties. This was the case of Saʿīd b. Musayyab (d. 715), a noble Qurayshī who lived in Medina under the Umayyad rule and pursued as his hobby the collection of the juridical decisions of the first five caliphs, as well as of historical traditions. As a prominent Qurayshī, he was on the payroll of the caliphate, but was also a busy textile dealer. It was not unheard of that governors of provinces combined trade with their administrative duties. Abū Hurayra, the famous companion of Prophet Muḥammad, for instance, accumulated wealth from trade during his governorship of Eastern Arabia under the reign of Caliph ʿUmar b. al-Ḫaṭṭāb (634–44), in addition to his income from the spoils of war and horse breeding.

Up to 800, merchants formed a dispersed community. Only in a few cases are they mentioned as participating, as a cohesive force, in military exploits. When, in August 683, a Syrian army sent by Caliph Yazīd I attacked the inhabitants of the holy city of Medina, the Medinese supposedly forced the perfumers, which included 400 individuals originating from Dārīn on the east coast of Arabia, to march with them against the Syrians. Failing in their attempt to avoid military service by recourse to their role as merchants, the perfumers were compelled to form a unit and assist the Medinese. Industriously and ingeniously, to avoid combat they erected their standard and quickly

[35] ADAMNANUS (1958) *De Loc. Sanct.* (Dublin: The Dublin Institute for Advanced Studies) Lib. 1. 1.

[36] Robert Brunschwig has suggested that this was probably organized for the Christian feast of the Exaltation of the Cross, the timing of which had been fixed by Emperor Constantine at 14 September. WHEATLEY, P. (2001) *The place where men pray together* (Chicago: University of Chicago Press) 243.

[37] MARAVAL, P. (2002) *Récits des premiers pèlerins chrétiens au Proche-Orient (IVe-VIIe siècle)* (Paris: Cerf) 240.

[38] See the discussion on the reliability of Arculfus' account in NEES, L. (2015) *Perspectives on Early Islamic Art in Jerusalem* (Leiden: Brill) 53–47. HOYLAND, R. G., WAIDLER, S. (2014) 'Adomnan's De Locis Sanctis and the Seventh-Century Near East', *English Historical Review* 129/539: 787–807.

deserted, as a result of which the Syrians, assuming that the standard signalled their support, came close to losing the battle.[39]

It is also very rare to find references to traders attached to the Umayyad court. They are depicted as escorting and advising the caliphs and their governors in cases of popular uprising, social discontentment, and economic affairs. However, they were not given any official role in the administration of the caliphate. In the late seventh and eighth centuries, merchants were used as spies, as they could easily seek information in cities and military camps, because of their linguistic skills and cultural affinities.[40] In 695, when the governor of Iraq, al-Ḥağğāğ, was facing the rebellion of Šabīb b. Qays al-Ḫariğī, the merchants of Anbār played an important role in helping to resolve the conflict, if we are to believe a report from the chronicle of al-Ṭabarī transmitted by Abū Miḫnaf al-Azdī (d. 774). According to al-Azdī, the merchants, to whom al-Ḥağğāğ had asked to report any information regarding the rebels, managed to warn the governor of the imminent coming of Šabīb b. Qays's army in Kūfa. Al-Ḥağğāğ and his representative in Kūfa, ʿUrwah b. al-Muġīrah b. Šuʿbah, could therefore efficiently prepare their defence and put an end to the rebellion.[41] This supports the overall picture of an active trading and multi-faith community, whose political participation was limited to a few Arab-Muslim 'noble' families leveraging their administrative position to engage in commerce.

2. ASCENDANCE OF *TUǦǦĀR* FROM 800

The development of Baghdad in 762 and the *emporia* in Sīrāf, Banbhore, Saymur, Khambayat, Ceylon, Kalah, Canton, Quanzhou, and Yangzhou provoked a shift in perspective. Merchants were encouraged to engage in larger, more complex forms of enterprise that created new systems of trade based on partnerships, in a religious and legal context favourable to profit-seeking.[42]

[39] AL-BALĀḎURĪ, *Ansāb al-ašrāf* 4 (Damascus: Dār al-yaqaẓat al-ʿarabiyyat) 43.

[40] In late antiquity, merchants also served as spies for both the Roman and Persian Empires. Consequently, it is reported that Roman emperors Honorius (395–423) and Theodosius (402–50) attempted in the early fifth century to prevent espionage by regulating commercial exchanges between the Roman and Persian territories. KAGAN, K. (2016) 'Spies Like Us: Treason and Identity in the Late Roman Empire', in R. W. Mathisen, D. Shanzer (eds.) *Romans, Barbarians and the Transformation of the Roman World* (Routledge) 161–74.

[41] AL-ṬABARĪ, Secunda Series, 2 (1964) 916.

[42] UDOVITCH, A. L. (1970) 249–61. From the late eighth century, the Ḥanafī jurists asserted a liberal vision of the economy, an understanding of the necessities of commerce, considering with flexibility the practical problems and succeeding, by plotting subterfuges, in circumventing disturbing prohibitions such as interest loans. The jurist Muḥammad Šaybānī demonstrated that a moderate search for profit and mercantile activities did not go against Islamic ethics, as the

While street vendors (*bāʿa*),[43] selling everything from groceries to furniture, and travelling pedlars (*ṭawwafūn*) did not escape their existing conditions, the *aḫbār* literature and dynastic histories from the ninth and tenth centuries bring to light the sociopolitical and financial rise of an elite, who gained social visibility and prestige from investing in long-distance trade, land, and manufacture after 800. In the literature, shopkeepers are designated in reference to the nature of their trade or to the geographical location of their shop. In his account on the arrival of the Qarmatians in Baghdad in the early tenth century, Ibn Miskawayh reveals how shopkeepers established near al-Muhawwalī gate, as well as along the Ṭābiq canal and in the quarter of al-Qalāʿīn, immediately closed and emptied their shops. These shopkeepers were not *tuǧǧār* but defined in a more general way using the phrase *ahl bāb al-Muhawwalī, wa nahr ṭābiq wa al-qalāʿīn*.[44] They formed an indefinite, amorphous group, without a distinct social status. By contrast, entrepreneurs or *tuǧǧār* emerged as powerful political players, seizing power to the detriment of the secular nobility, clergy, and banking elite in Syria and Iraq, from the ninth century onwards.

2.1 Financial

The financial rise of this particular elite of merchants can be seen through testimonies and remains of their households, territorial possessions, and comfortable lifestyle. *Aḫbār* collections[45] on court life and dynastic histories bring an excellent testimony of their empowerment that was not through local trade, strictly speaking, but investment in long-distance exchange, land, and production. For instance, the chronicle of al-Balāḏurī mentions an aristocratic estate of southern Transjordan, which had belonged to the Umayyads, and then in 750 was handed to the ʿAbbāsid family, and finally passed into hands of wealthy *tuǧǧār* of Kūfa at the end of the eighth century.[46] Al-Ṭabarī provides corroborative evidence, portraying the *tuǧǧār* as a self-assertive entrepreneurial community in an anecdote about the origins of the Qarmatians in the countryside of al-Kūfa in the last decades of the ninth century. In

gains could be used for charity to the poor. See BONNER, M. (2001) 'The *kitāb al-Kasb* attributed to al-Shaybānī: poverty, surplus, and the circulation of wealth,' *JAOS* 121/3: 411.

[43] AL-TANŪḪĪ (1922) 60. The author defines the small dealers as the ones whose business capital is from one to three dīnārs.

[44] IBN MISKAWAYH (1920–1) *Taǧārib al-umam wa al-taʿāqub al-himam* 1, H. F. Amedroz, D. S. Margoliouth (eds.) (Oxford: Basil Blackwell) 179.

[45] AL-MASʿŪDĪ (1861–77) *Murūǧ al-ḏahab*, trans. B. De Meynard, C. Pavet de Courteille (Paris: Imprimerie impériale); AL- ṬABARĪ (1879–1901, 2nd ed. 1964) *Ta'rīḫ al-rusul wa al-mulūk*, Tertia Series (Leiden: De Goeje).

[46] AL-BALĀḎURĪ (1866) *Kitāb futūḥ al-buldān* (Leiden: De Goeje) 129.

the village of Nahrayn in 278/891, a group of *tuǧǧār* (*qūm mīn al-tuǧǧār*) invested in a palm grove in the vicinities of a greengrocer's shop (*biqqāl*). Through the greengrocer, the *tuǧǧār* hired a Qarmatian to gather the dates and guard the enclosure in which the fruits were stored. While the work was done correctly, the *tuǧǧār* thought the Qarmatian had stolen those dates and sold their core. They accused him wrongly before realizing their mistake. While al-Ṭabarī's account remains a personal interpretation of oral sources, it still illustrates the vision of the Baghdadian elite regarding the success of the *tuǧǧār* that did result in speculative investment in land as in trade; their abusive attitudes towards wealth accumulation contrasted with the strict ascetism of the Qarmatian. Properties were acquired for various reasons. Territorial possession carried jurisdictional and political authority. It could also generate income through rents. Real estate constituted a secure form of investment, increasing amounts of capital acquired through trade, and conferred social status.

Tuǧǧār's households in ninth-century Baghdad[47] and Baṣra[48] in Iraq, as well as Sīrāf in Iran, conveyed their wealth through the literary description and material remains of their monumentality and ornaments. In Sīrāf, the main port of Fārs province, which was continuously occupied from the ninth century to the earthquake of 977, Ibn Ḥawqal mentions the existence of a wealthy community of businessmen highly respected by the local authorities and deriving its wealth almost entirely from the trading network that supplied the Near East with products from India and the Far East.[49] Their houses were unusually large, including several storeys according to Ibn Ḥawqal. Remains of these houses were found in 1967, during the excavation of the port, in a residential zone occupying a raised ground above the congregational mosque and the bazaar. The houses, square in form and built in stones and gypsum mortar, occupied areas between 270m^2 and 450m^2, and each presented a similar plan, defined as several rooms around impressive paved courtyards, accessible by an entrance, either central or offset. Although only one fragment of stucco survived *in situ*, the discovery of numerous fallen pieces proves that every house was decorated with carved and moulded plaster arranged in panels, friezes, and pediments. Among the ornaments were frequent star and polygon patterns, vegetal elements, and Qur'anic inscriptions.[50] This attests the sophistication of the traders' urban holdings in Sīrāf, whose wealth relied on overseas exchange.

[47] AL-MAS'ŪDĪ, 7 (1861–77) 16–25.
[48] AL-ǦĀḤIẒ (1984) *Kitāb al-buḫālā'* (Cairo: Dār maktaba al-hilāl) 115–16.
[49] IBN ḤAWQAL (1939) *Kitāb ṣūrat al-arḍ* (Leiden: Brill) 269.
[50] WHITEHOUSE, D. (2002) 'The House of Siraf, Iran', in D. Waines (ed.) *Patterns of Everyday Life* (Aldershot: Ashgate) 179–262; (2009) *Siraf: History, Topography and Environment* (Oxford: Oxbow Books).

Remains of similar houses from the ninth to thirteenth century have been excavated between 1958 and 1965 at the site of Banbhore in Pakistan at the mouth of the Indus delta,[51] and since 2011, by a Pakistani-French and Italian team of archaeologists.[52] The site has been identified with the old city of Daybul, which was conquered by the Arab-Muslims in 711. Archaeological work has revealed a fortified pre-Islamic area and a lower unwalled city that the Muslims reoccupied. In the eighth and ninth centuries, Banbhore/Daybul enjoyed, as a commercial harbour, a great prosperity in connection with the Indian Ocean trade. Within the walled settlement, a congregational mosque, dated by an inscription to 727,[53] was built on the east side shortly after the capture of the city. Around the mosque were found the remains of a well-planned early Islamic residential area. Although the discoveries have still to be fully published, the preliminary reports indicated that the houses were unusually large and planned on an elaborate scale. Expensive lime plaster was used. Fragments of Chinese porcelain, celadon, glazed pottery, Indian artefacts, coins, beads, and glassware were found, evidencing the wealth of a local elite of mainly traders in the early Islamic age.[54]

The financial rise of *tuǧǧār* finally emerges from the textual sources through the descriptions of their clothes and daily conduct. Many insights from textual testimonies highlight the luxurious taste of this urban elite. In his house of Baghdad, the jeweller Ibn al-Ǧaṣṣāṣ, who was enormously rich according to al-Tanūḫī and a close adviser of the Tulunid Emir Ḫumārawayh before leaving Egypt for the court of Caliph al-Muqtadir in the first years of the tenth century, enjoyed a comfortable life.[55] The chronicle of al-Mas'ūdī reports the direct testimony of Abū Sa'īd Aḥmed b. al-Ḥusayn b. Munqiḏ, which indicates that the *tāǧir* possessed many baskets upholstered in silk containing precious stones, among them rubies, as well as hoarded golden ingots.[56] Equally significant is an anecdote about Aḥmed b. 'Umar b. Ḥafṣ, a wealthy *tāǧir* of Askar in the province of Kerman, transmitted to al-Tanūḫī by the local judge Abū al-Ḥasan Yūsuf Ibn al-Azraq. The judge complains about the tumultuous life of the *tāǧir*'s son. It is reported that the son was using the family wealth to buy expensive robes, enjoy the company of singing-girls, and organize important feasts, when his father was travelling to Isfahan.[57]

[51] KHAN, F. A. (1963) *Banbhore: A preliminary Report on the recent Archaeological Excavations at Banbhore* (Karachi).

[52] QUDRATULLAH, S. (1981) 'The Twin Ports of Daybul', in *Sind through the Centuries* (Karachi) 97–105.

[53] S. M. ASHFAQUE (1969) 'The Grand Mosque of Banbhore', *Pakistan Archaeology* 6: 182–209; M. A. GHAFUR (1966) 'Fourteen Kufic Inscriptions of Banbhore, the Site of Daybul', *Pakistan Archaeology* 3: 65–90.

[54] MUGHAL, M. R. (1992) 'Early Muslim Cities in Sindh and Patterns of International Trade', *Islamic Studies* 31(3): 267–86.

[55] AL-MAS'ŪDĪ, 8 (1861–77) 117–18.

[56] AL-MAS'ŪDĪ, 8 (1861–77) 120–1.

[57] AL-TANŪḪĪ (1922) 95.

Interestingly, the chroniclers suggest that rulers and religious authorities did not impede the *tuǧǧār*'s financial success, as their wealth could be used for charity or lent to the ʿAbbāsid government for military endeavours, or to prop up government finances during its relative weakness in the tenth century. From the rule of al-Muqtadir in 908 and from 945 the rise of the Buyids, when the caliphate began to lose its unity and the government its authority, the leading merchants acquired influence in official circles by coming to the government's assistance with loans.[58]

2.2 Identity

From the ninth century, *tuǧǧār* became increasingly involved in the public and cultural life of Near Eastern cities. They became known as benefactors, using charity to emphasize their social rank. Al-Tanūẖī mentions that *tuǧǧār* were invited to attend the official investiture ceremonies for *qāḍī*s during the caliphate of al-Muqtadir (908–32).[59] Their presence could also be required during trials, involving public personalities, such as that of the *qāḍī* Wakīʿ (d. 916) in the early tenth century. Al-Tanūẖī indicates that the *qāḍī* was prosecuted for having abandoned his father and left him living in miserable conditions. He was to appear before a tribunal held in the congregational mosque of Baghdad, where it is said that the presence of 'the most eminent of the Witnesses on both sides of the Tigris and [. . .] the most distinguished *tuǧǧār* and clerks' had been required.[60] This participation in public affairs suggests they already had a distinctive status and social prestige.[61]

In cultural circles, too, *tuǧǧār* made their mark. Describing the reign of al-Mahdī (775–85), al-Masʿūdī details the famous *tāǧir* and poet Ismail b. Kasīm, more commonly called Abū al-Atahyah, whose knowledge of poetry and theology was widely appreciated.[62] Indeed, in his chapter dedicated to the Barmakids, al-Masʿūdī indicates that Abū al-Atahyah was invited regularly to participate in debates that were organized privately and brought together theologians and philosophers.[63] These examples of civic

[58] Ibn Allan al-Yahudi (d. 1079), for instance, was a wealthy merchant and farmer of Baṣra, who served the ʿAbbāsid family for more than twenty years. He is reported to have lent the ʿAbbāsid rulers over 100,000 dīnārs. FISCHEL, W. (1933) 'The Origins of Banking in Medieval Islam: A Contribution to the Economic History of Jews in Baghdad in the Tenth Century', *Journal of Royal Asiatic Society* 33(2): 339–52.

[59] AL-TANŪẖĪ (1922) 118. [60] AL-TANŪẖĪ (1922) 161–2.

[61] See the chapter 'Classe, statut, parti', in WEBER, M. [1971] (1997) *Économie et Société: L'organisation et les puissances de la société dans leur rapport avec l'économie 2* (Paris: Plon).

[62] AL-MASʿŪDĪ, 6 (1861–77) 244–5. [63] AL-MASʿŪDĪ, 6 (1861–77) 244–5.

responsibility suggest an increasingly powerful community, whose status could now be readily identified within society by the range of privileges they enjoyed and the associations they made.

Charitable giving provided a way for *tuǧǧār* to assert their identity and piety, as well as legitimizing their wealth and cementing their social standing in the ninth and tenth centuries. They were especially concerned with the morality of their activities, particularly excessive usury, which was prohibited by Islam, but a necessary part of commercial enterprises. Literary sources reveal that they provided funding for the maintenance of the pilgrimage routes to Arabia, as did Ibn al-Dukainī, the son of a wealthy Baghdadian *tāǧir* in the tenth century, under the caliphate of al-Muqtadir. Al-Tanūẖī, describing his comfortable life, mentions his collection of robes of honour, his procurement of slaves, and feasts. However, in an attempt to display his piety and enhance his status, he regularly performed the *ḥaǧǧ* and patronized pious works in Arabia.[64] This elite also provided funding for the commissioning of works of art and architecture. Dimitri Gutas demonstrates that they were great patrons of the translation movement in the ninth century.[65] Financial donations could also be provided for the maintenance of Muslim and Christian religious edifices. Al-Tanūẖī provides a specific example of this in his discussion of the Baghdadian *tāǧir* Ibn Rizq Allah. He was the brother-in-law of Ibn Abī ʻAun, who was one of the most prominent members of a dissident group of Imamites following Ibn Abi ʻAzāqir in the second half of the tenth century. Al-Tanūẖī indicates that the refurbishment of a church situated in Islamic territory relied on his financial donations. This was part of an arrangement with a monk living in a Byzantine village probably at the edge of the *dār al-Islam*. In return for Ibn Rizq Allah's charity, the monk promised to bring clothing and heavy warm blankets during winter to Muslim captives.[66]

Tuǧǧār's benevolence was not necessarily a personal choice but could also be exploited by caliphs and princes. They could be called upon by both the secular and religious elite to assist in specific situations, for famine relief or mendicants. This was the case of the Kātib Ibrāhīm b. ẖafīf at the head of the *diwān al-nafaqāt*, as reported by al-Tanūẖī, who requested a wealthy entrepreneur to provide fifty warm clothes for the mendicants of al-Karẖ in Baghdad as the weather had become cold, and later to grant thirty to forty dirhams to a 'man of noble house'.[67] The *tuǧǧār* therefore played an increasing role in the provision of charity to the poor in the ninth and tenth centuries, which would remain the case up to the Mamluk period.

[64] AL-TANŪẖĪ (1922) 93–4.
[65] GUTAS, D. (1998) *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early ʻAbbasid Society* (2nd-4th/5th-10th c.) (London: Routledge) 2–5.
[66] AL-TANŪẖĪ (1922) 33. [67] AL-TANŪẖĪ (1922) 242.

2.3 Cultural

In the ninth and tenth centuries, this elite may have increasingly formed a social *class*. Many insights reveal that *tuǧǧār* came to share a way of life, as well as a tendency towards social and spatial segregation, living secluded from the rest of the population. The chronicle of al-Masʿūdī offers detailed testimonies of the private receptions held by the wealthiest of them in Baghdad in the early ninth century, that were only accessible to their few privileged financial partners. One of these anecdotes was transmitted by the famous muʿtazilite of Baghdad Thumāma b. Ašras (d. 828). The latter reported that under the caliphate of al-Ma'mūn, Prince Ibrāhīm b. Mahdī spent a night in the house of a rich *tāǧir* of Baghdad, who was originally a merchant from the association of clothing dealers (*tuǧǧār min al-bazāzīn*). The *tāǧir* was known to be particularly wealthy and was preparing to receive his guests. Using a subterfuge, the prince managed to get invited to the dinner. It is reported that 'the table was richly served and [. . .] the flavour of food exceeded the scent.' The prince related that after dinner, the guests walked towards 'a spacious and richly ornamented living room', where a young slave was waiting with a lute. This story reveals the extreme refinement of this elite who shared a common culture and a desire to segregate from the rest of the population, by keeping private their meetings and receptions, limiting access to individuals from the same community. According to Thumāma b. Ašras, the prince fell in love with the young slave and married her. Thanks to this alliance, the *tāǧir* would have become a courtier (*nadīm)* of the caliph and would have been allowed in court.[68] This emphasis put on the intimacy which grew between him and the caliph attests to the favours that this elite received from the Muʿtazilites and the aristocracy in the early ninth century.

This elite was made up of individuals who came to share a common education and literature. Their sense of belonging to a single community developed in such a way that, by the eleventh century, practical manuals pertaining to the ethical theory of trade emerged as a distinct literary genre. Emphasizing the merits of trade, they were written for *tuǧǧār* and included strategies and advice to successfully accumulate wealth. The authors employed a coherent and consistent approach supported by realistic and detailed instructions on how their readers could become prosperous businessmen and respectable Muslims. The guide of Abū al-Faḍl Ibn ʿAlī al-Dimašqī[69] constitutes a pioneering treatise. It offers a classification of merchants—the wholesaler (*ẖazzan*), travelling merchant (*rakkad*), and exporting shipper (*muǧahhiz*)—and merchandises. The part about goods focused on the essence

[68] AL-MASʿŪDĪ, 7 (1861–77) 16–25.
[69] IBN ʿALĪ AL-DIMAŠQĪ (1900) *Kitāb al-išāra* (Beirut: Maṭbaʿat al-mu'ayyid); (1994) *Éloge du commerce*, trans. Y. Seddik, (Tunis: Arcanes).

of wealth, the way to test gold, various commodities and their prices, crafts, and industries. However, it also included behavioural rules to practise these activities with good faith and intention, as a social duty, avoiding forbidden business and fulfilling religious rituals. These manuals illustrate the *tuǧǧār*'s increasing need for practical knowledge, in the context of growing competition for wealth and social position from the ninth century. These guidebooks reflect the rise in respectability of their profession, the increasing commercialization of the economy in early Islam, and the progressive development of a collective self-image.[70]

3. *TUǦǦĀR*'S POLITICAL AND RELIGIOUS CAREERS

The ninth- and tenth-century literary testimonies, which report on the rise of this entrepreneurial elite in the early Islamic Near East, attest to the *tuǧǧār*'s gradual assimilation into the administration of the ʿAbbāsid Empire from the late eighth century. With their financial and social rising, ʿAbbāsid rulers may have wanted to earn the favour of a community that could be used for political, military, and economic purposes, in particular in the context of the fragmentation of the Empire's unity and the emergence of regional independent authorities.

The use of merchants as spies that is a common pattern in the ancient world, and was already in effect during the Umayyad rule, continued after 750 and is well attested in the late eighth and ninth centuries, according to the chronicle of al-Ṭabarī. It is reported that *tuǧǧār* played an essential role during the fratricidal wars opposing al-Ma'mūn and al-Amīn, as well as during the famous rebellions of Ibrāhīm b. ʿAbdallāh al-Maḥḍ. This latter happened during the rule of al-Manṣūr in 762–3, when the caliph left al-Hāshimīyah to settle permanently in Baghdad. The rebellion carried out by Ibrāhīm b. ʿAbdallāh al-Maḥḍ constituted the first ʿAlid uprising against the ʿAbbāsid regime. Al-Ṭabarī mentions that some merchants, and a money changer named Maʿqil b. Muqrin or Muqarrin, were appointed to spy on the rebels' movements. Thus, when Ibrāhīm b. ʿAbdallāh al-Maḥḍ began to move on to al-Kūfa, the caliph al-Manṣūr, helped by the governor of Rayy, Salm b. Qutaybah, could repel the enemy efficiently. After the flight of most of his followers, Ibrāhīm b. ʿAbdallāh al-Maḥḍ was defeated at the Battle of Bā Khamra, near Kūfa, on the 25 Ḏū al-Qaʿdah 145/14 February 763.[71] This account attests to the central role the merchants played in winding down the rebellion. Al-Manṣūr relied heavily on them, as they could easily gather

[70] GOLDBERG, J. (2012) 38–9.

[71] AL-ṬABARĪ, Tertia Series, 1 (1964) 294–5.

information covertly. Similarly, during the fourth *fitna* between al-Ma'mūn and al-Amīn over the succession to the ʿAbbāsid caliphate's throne, after the death of their father Hārūn al-Rašīd (786–809), many merchants acted as spies, and their travels became therefore closely monitored by both rulers. In 809, al-Ma'mūn, who retreated to Ḫurāsān, arranged for active surveillance of the roads and traders travelling from Iraq. This was set up to avoid them infiltrating the army and reporting information regarding al-Ma'mūn's military strategy.[72] Al-Amīn, who was in Iraq at that time, was also very suspicious and established a garrison in 810 between Hamadān and Rayy, on the road towards Ḫurāsān, in order to disrupt the food supply to al-Ma'mūn's troops, as well as to control the displacements of traders, who could act as potential spies.[73]

The rise of *tuǧǧār* into the ʿAbbāsid government was a long-term process. In the local provinces of the Empire, they began to get a quasi-official status in the fiscal administration from the late eighth century. Many testimonies reveal that the Muslim authority relied heavily after the Arab conquest on the ecclesiastical elite[74] and secular nobility, such as the Dihqāns and Shahāriǧa in Iraq,[75] or the Naḫarar in Armenia, to act as intermediaries with the local

[72] AL-ṬABARĪ, Tertia Series, 2 (1964) 783.

[73] AL-ṬABARĪ, Tertia Series, 2 (1964) 817.

[74] PAYNE, R. (2009) 'Persecuting Heresy in Early Islamic Iraq: The Catholicos Ishoyahb III and the Elites of Nisibis', in N. Lenski, A. Cain (eds.) *The Power of Religion in Late Antiquity* (Aldershot: Ashgate) 397–409; HOYLAND, R. (2008) 'Jacob and Early Islamic Edessa', in Bas Ter Haar Romeny (ed.) *Jacob of Edessa and the Syriac Culture of His Day* (Leiden: Brill) 11–25. In the region of the Diyār Muḍar at Edessa and in the Diyār Bakr at Dārā or Nisibe, the bishop Ishoʿyahb, for instance, would have been in charge of the collection of taxes for the Muslim rulers in 650.

[75] DURI, A. (2011) *Early Islamic Institutions. Administration and Taxation from the Caliphate to the Umayyads and ʿAbbāsids* (London: I.B. Tauris) 110. For more on the fiscal administration of Iraq and the eastern provinces of the Islamic Empire during the Umayyad caliphate, see MORONY, M. (1984a) *Iraq after the Muslim Conquest* (Princeton: Princeton University Press) 102–3. He demonstrates that from the reign of the Umayyad caliph Muʿāwiya (661–80), the governor Abū al-Mughira Ziyād b. Abīhi continued to rely on the secular nobility (*dihqāns*) to collect taxes in the eastern provinces of the Islamic Empire. For more on early Islamic Palestine, see STROUMSA, R. (2012) *People and Identities in Nessana* (Charleston: Proquest, Umi Dissertation Publishing). His research is based on the papyri of Nessana. They report that from the late Roman era, land taxes were collected by the local clergy (bishops, archbishops) and that this practice was perpetuated in early Islam. See also GROHMANN, A. (1963) *Arabic papyri from Hirbet el-Mird*, coll. Bibliothèque du Muséon 52 (Leuven: Publications Universitaires) 55. Grohman argues that the papyri of Khirbet el-Mird provide similar evidence of the continuous administrative role of the local clergy in Palestine and southern Greater Syria in tax collection from late antiquity to the early eighth century. See also GIL, M. (1992) 153. According to Moshe Gil, the taxes paid by the Christian population of Jerusalem and its hinterland under the rule of Muʿāwiya (580 gold coins per year) was collected and sent to the Muslim *qāḍī* of Caesarea by the local patriarch. It appears that the exploitation of the late antique elites in the western part of the Islamic Empire was not limited to Greater Syria and is also attested in Egypt, where Ibn ʿAbd al-Ḥakam indicates that the Muslim authority relied on the Coptic elites (Ġarāfasū, Māzūt) to levy the annual tax under the rule of the Umayyads.

populations and levy taxes. However, from the late eighth century, the caliphs began increasingly to assign this task to this business elite, alongside the Christians and old landowning nobility. Compared to clerics and landowners, they could facilitate the payment of taxes, by creating liquidity from the sale of the peasants' harvests or by lending money in case of crop failure. Through the application of trade, the *tuǧǧār* facilitated the collection of taxes in cash, demanded by the governors. This phenomenon is well testified in northern Iraq, in the ninth-century monastic histories of Bishop Thomas of Marǧā[76] and Zuqnīn.[77] They report that the collection of the land tax in Mosul and its hinterland, traditionally carried out by the Nestorian *dahāqin*, became increasingly the responsibility of the local Arab tribes and the most prominent local *tuǧǧār*, at the end of al-Manṣūr's rule in 772–82. The *tuǧǧār* and money changers provided help to the local governor Mūsā b. Muṣʿab in tax collection, as well as to cover the execution of payments and report fiscal abuses.[78] This process also occurred in Ḫurāsān,[79] which in the ninth century experienced a cotton boom and the rise of a robust urban culture. In Isfahan, Rayy, Nishapur, and Merv, Muslim cotton entrepreneurs came to dominate, as a new 'patrician class', the urban society and politics.[80] The involvement of this elite in the fiscal administration of the provinces did not lead, however, to a full transfer of power; the old nobility retained political power in many areas, as is evidenced in Fārs and lower Iraq under the caliphate of al-Muntaṣir (861–2).[81]

However, the *tuǧǧār*'s political horizon was not bounded by their city walls, for their role in government service extended from the rule of al-Ma'mūn (813–33). From his caliphate, and then under the reign of his successors al-Muʿtaṣīm (833–42) and al-Wāṯiq (842–7), they saw their political responsibilities increasing, as they came to occupy official administrative posts in government. Various clues show that they became valuable assets for the caliphs and contributed actively in the administration of the Empire. One can surmise that their adherence to Muʿtazilite thought, which under the caliphate of al-Ma'mūn became the official doctrine of the state, could have aided or facilitated their entry into the government up to 847.[82] Their political

DEMIRI, L., RÖMER, C. (2009) *Texts from the Early Islamic Period of Egypt: Muslims and Christians at their First Encounter* (Vienna: Phoibos) 53.

[76] THOMAS OF MARǦĀ (1893) *The Book of Governors* (London) 142/294, 198/386; ROBINSON, C. (2000) *Empire and Elites after the Muslim Conquest: The Transformation of Northern Mesopotamia* (Cambridge: Cambridge University Press) 94–5.

[77] HARRAK, A. (1999) 237, 240.

[78] HARRAK, A. (1999) 241.

[79] AL-ṬABARĪ, Secunda Series (1964) 1029; DURI, A. (1974) 'Notes on Taxation in Early Islam', *JESHO* 17/2: 142–3.

[80] BULLIET, R. W. (2009) *Cotton, Climate, and Camels in Early Islamic Iran* (New York: Columbia University Press) 63–7.

[81] AL-ṬABARĪ, Tertia Series (1964) 1535.

[82] IBRAHIM, M. (1990) *Merchant Capital and Islam* (Austin: University of Texas Press) 192–3.

ascension was not necessarily due to their close connections to the ʿAbbāsid rulers. It happened that *tuǧǧār*, who had been rewarded with official court offices, arranged for commercial partners to be granted positions in the administration. The former haberdasher Abū Umayyah al-Aẖwas, whom the vizier Ibn al-Furāt appointed as judge of Baṣra, Wāsiṭ, and the seven districts of Ahwāz[83], had, for instance, the right to assign as his 'deputy' the *tāǧir* and fellow coppersmith Saʿīd al-Saffār.[84]

Tuǧǧār, whose *nisba* (notably *al-zayyāt* the olive-oil trader or *al-jawharī* the jeweller) identifies them as belonging originally to the merchant community, had thus risen to positions of judges[85] (*qāḍī*) or jurists (*fuqahā'*) in the administration of justice and religion, as demonstrated by Hayyim Cohen. Cohen's research on the socio-economic origin of the ninth-century *fuqahā'*, based on the examination of the *nisba* of more than four thousand jurists mentioned in the biographical dictionaries of the ninth to sixteenth century, has revealed that most of them belonged to the merchant class and were descendants of families involved in commerce. A third of them were connected to the textile trade.[86] Despite the fact that these conclusions must be taken with caution regarding their quantitative dimension, the overall view of a class of religious jurists (*fuqahā*') being tied to urban commercial activities is most likely accurate.[87] The involvement of *tuǧǧār* in Islamic jurisprudence from the ninth century onwards gave rise to legal intellectuals with a commercial background, able to forge the law to fit around commercial practice.[88]

Tuǧǧār could also hold positions as secretaries (*kātib*) in the Dīwān, in the offices of the chancery (Dīwān al-rasā'il), in the salaries and pensions service (Dīwān zimām al-nafaqāt), or in the office property management of the state (Dīwān al-mustaġallat). Al-Ṭabarī mentions several cases of *tuǧǧār*, who held high administrative offices, as the *mawlā* and jeweller Ibrāhīm b. Rabāḥ

[83] AL-TANŪẖĪ (1922) 115. [84] AL-TANŪẖĪ (1922) 116.

[85] AL-ṬABARĪ, Tertia Series 2 (1964) 1121. The vendor of dates and dry fruits Abū Naṣr al-Tammār was judge in Raqqa during the caliphate of al-Ma'mūn in 833.

[86] COHEN, H. J. (1970) 16–61. This is also a key point of R. W. Bulliet (1972) *Patricians of Nishapur: A Study in Medieval Islamic Social History* (Cambridge MA: Harvard University Press).

[87] Alongside biographical dictionaries, the *aẖbār* collections and chronicles talk about the involvement of *tuǧǧār* in religious affairs. For instance, al-Tanūẖī mentions the case of *tuǧǧār* who were *fuqahā*', leading the prayer or teaching the Qu'ran in Baghdad during the reign of al-Muʿtaḍid (d. 902). AL-TANŪẖĪ (1922) 152. Al-Masʿūdī also gives the example of the fodder trader Muḥammad b. Hudail who was a traditionist in Baṣra under the early ʿAbbāsids. AL-MASʿŪDĪ, 6 (1861–77) 369–70; see also 7 (1861–77) 374–5 for the history and religious functions of the money changer Abū Ḥafṣ al-ṣayrafī.

[88] By contrast, Gene Heck suggests that 'the commerce in the Christian West was failing precisely for the reason that their own legal intellectuals, far less schooled in the techniques of trade, lacked the medieval Muslims' creative genius for such ecclesiastical exegesis'. HECK, G. W. (2006) *Charlemagne, Muhammad, and the Arab Roots of Capitalism* (Berlin: De Gruyter) 261.

b. Šabīb al-Jawharī during the caliphate of al-Wāṯiq. This latter would have been appointed in the salaries and pensions service, before supervising the office property management of the state.[89] It appears that a few of them were even promoted as viziers at the end of their political career, which constituted the highest positions in the caliphal administration. This was the case of Muḥammad b. ʿAbd al-Malik al-Zayyāt, the famous oil trader, judge, and then vizier, in whom Muʿtaṣim placed implicit trust. Originally, al-Zayyāt was appointed chief secretary in the *diwān al-rasā'il* at the end of al-Ma'mūn's reign.[90] Then, he combined this charge with the responsibility of the production of royal insignia, such as the parasols (*al-mušammas*) and tents (*al-fasāṭīṭ*) during the caliphate of al-Muʿtaṣīm. According to the chronicle of al-Ṭabarī, Muḥammad b. ʿAbd al-Malik al-Zayyāt became a key figure in the ʿAbbāsid government during the second quarter of the ninth century. In 838–42, he was appointed vizier by the caliph al-Muʿtaṣīm[91] and then grand vizier during the rule of al-Wāṯiq.[92] His political success led him to obtain new social privileges, such as wearing the official black ʿAbbāsid costumes (*durrāʿah*) and carrying a sword. Al-Masʿūdī describes how influential he was on al-Wāṯiq's politics. He mentions that the caliph steadily relied on al-Zayyāt, who was vested with all powers.[93]

ʿAbbāsid rulers often employed *tuǧǧār* in diplomatic negotiations abroad in connection with trade, negotiations for the purchase of captives, or in the preamble to a marriage alliance.[94] These missions represented perhaps the most frequent political service that they had an opportunity of performing. They were sent, for instance, by Caliph al-Ma'mūn around 825 to the king Dahma to foster political alliances between the caliphate and northern India.[95] Tenth-century sources give details of this embassy, providing the full text of the correspondence between the local king and the caliph, as well as a list of the gifts carried to India. Their involvement in foreign affairs in Tibet and India is also confirmed in a Sogdian inscription carved on a rock near Tanktse, in eastern Ladakh. It records the passage of a trader from Samarkand with a Nestorian monk, Nōsh-farn, as ambassadors to the Tibetan king in the

[89] AL-ṬABARĪ, Tertia Series, 2 (1964) 1331.

[90] AL-ṬABARĪ, Tertia Series, 2 (1964) 1183–4.

[91] AL-ṬABARĪ, Tertia Series, 2 (1964) 1184.

[92] AL-ṬABARĪ, Tertia Series, 2–3 (1964) 1331, 1369, 1370–2; SOURDEL, D. (1959–60) *Le vizirat abbasside, 749–936* 1 (Damascus: Ifpo) 254–69.

[93] AL-MASʿŪDĪ, 7 (1861–77) 147–8.

[94] As close adviser of the Tulunid emir Ḫumārawayh (884–96), the jeweller Ibn al-Ǧaṣṣāṣ was sent in 892 to organize the wedding of the emir's daughter with Caliph al-Muʿtaḍid. AL-MASʿŪDĪ, 8 (1861–77) 283.

[95] DUNLOP, D. M. (1972) 'A Diplomatic Exchange between al-Ma'mūn and an Indian King', in S. A. Hanna (ed.) *Medieval and Middle Eastern Studies (Essays in Honor of Aziz S. Atiya)* (Leiden: Brill) 133–43.

year 841–2.[96] This exemplifies the ʿAbbāsids' interest in exploiting *tuǧǧār* to secure peace with foreign powers on the Byzantine and eastern frontiers of the caliphate, and perhaps the attempt of *tuǧǧār* to gain better trading conditions at borders, through these diplomatic ties.

The involvement of *tuǧǧār* in foreign diplomacy included them arranging the exchange of prisoners, as happened during the rule of Caliph al-Wāṯiq. In the year 845, the ruler sent the grand vizier and *tāǧir* Muḥammad b. ʿAbd al-Malik al-Zayyāt to negotiate the release of Muslim captives with envoys of the Byzantine emperor Michael III. Al-Zayyāt was the ideal candidate to oversee this mission, because of his sensitivity to commerce, inherited from his father, and his knowledge of the politics of his time. He was accompanied by H̱āqān al-H̱ādim, a former diplomat who served under the caliphate of Hārūn al-Rašīd, and a certain Ǧaʿfar b. al-Ḥaḏḏā', who belonged to the artisan class. Al-Yaʿqūbī[97] indicates that Ǧaʿfar was the son of a cobbler, who was promoted as *ṣāḥib al-ǧaysh* in the ʿAbbāsid army despite his modest origins. He played a fundamental role during and after the negotiations. He interrogated the prisoners, who had been repatriated to the Near East, in order to identify the Muslims who had converted to Christianity during their stay in Constantinople.

A last example is offered by Ibn Faḍlān. In 921, the embassy organized by the ʿAbbāsid caliph al-Muqtadir to Hazaria and Volga Bulgaria, to consolidate the north fringes of the caliphate, was conducted by Ibn Faḍlān and Takīn al-Turkī, originally involved in metallic ore trade. Ibn Faḍlān and Takīn al-Turkī were accompanied by Sawsan al-Rassī, a Turkic client of the ambassador Nadhīr al-Haramī, and by the Samanid governor of Ǧurgān, Bārs al-Saqlabī. Various interpretations have been suggested to explain the purpose of the embassy, ranging from religious propaganda to the indirect support of the H̱awārizm and Armenian trade with the Slavic and Scandinavian communities.

Evidence would seem to support the idea that *tuǧǧār* were also occasionally asked to provide financial services to the caliphal power.[98] Finance minister al-Ḥasan b. Sahl, under the rule of al-Mutawakkil, frequently relied on loans, in order to alleviate the debts of the treasury. It is reported that, when al-Ḥasan b. Sahl died on the 25 Ḏū al-Qaʿdah 236/20 May 851, several *tuǧǧār* attended

[96] GILLMAN, I., KLIMKEIT, H. J. (1999) *Christians in Asia before 1500* (Ann Arbor: University of Michigan Press) 218; BAUMER, C. (2006) *The Church of the East: An Illustrated History of Assyrian Christianity* (London: I.B. Tauris) 175.

[97] AL-YAʿQŪBĪ (1883) *Ta'riẖ* 2 (Leiden: Houtsma) 588.

[98] They came to replace the late antique professional bankers known as *argentarii*, who emerged as powerful political players in the imperial capital by the reign of Justinian, in the context of the increasing monetization of the late Roman economy. These bankers, who were organized into an officially recognized guild, acted, at the lowest level, as money changers, but at the highest level as the managers of deposit banks and lenders of money.

his funeral specifically to request the repayment of the borrowed funds.[99] Caliphs and princes certainly resorted regularly to them for loans to finance their military endeavours, which required significant capital.

Political power and social prestige therefore came to be the culmination of the success and fortune of this new elite, whose rise in government circles was based on complementary interests between the caliphs and the merchants. It appears that their political ascendance was indeed largely favoured by the caliphs, who wished to gain the support of this community to use their financial and diplomatic assets. For the *tuǧǧār*, who did not accept official appointments, the ʿAbbāsid rulers may have ensured their loyalty with financial compensations, as happened during the reign of al-Muʿtaḍid in 900, according to al-Tanūḫī. The vizier Ubaydallah b. Sulayman would have very generously paid the trader Abu ʿAbdallāh Ibn Abī ʿAuf to ensure his allegiance and get his agreement to act ‘as intermediary in important negotiations, and take a hand in lucrative affairs’.[100] Still, although their rise into the administration may have been beneficial to the authority, it also helped the merchants to gain social privileges, theoretically reserved to the ʿAbbāsid nobility, such as the right to wear noble clothing, to acquire properties and lands that previously belonged to the royal family, as well as to defend the interests of their class.

4. *TUǦǦĀR* AND AUTHORITY

Ninth- and tenth-century *aḫbār* collections provide us with various anecdotes depicting the relationships between *tuǧǧār*, who were rewarded with official court offices or held temporary appointments, and ʿAbbāsid rulers. The *tuǧǧār*, who participated in the exercise of power, often combined their duties with their investment activities. Therefore, in return for the financial and political support they provided to ʿAbbāsid caliphs, they were able to use their privileged positions to secure optimum trading conditions. The written sources emphasize that they could also use their influence or manipulate the rulers to the advantage of their community. In this way, *tuǧǧār* could easily gain access to the military and political support that the expansion of their activities would necessitate, by contrast with early medieval commerce in continental Europe, which was dissociated from public authority.[101] This supports the idea of ‘class consciousness’, meaning that in early Islam the

[99] AL-ṢŪLĪ (1935) 76; IBN MISKAWAYH (1914–19) 329.

[100] AL-TANŪḪĪ (1922) 45–6.

[101] VAN DOOSSELAERE, Q. (2009) *Commercial Agreements and Social Dynamics in Medieval Genoa* (Cambridge: Cambridge University Press) 59.

leading urban *tuğğār* came to constitute a politically aware community capable of acting to promote and defend their common interests.

4.1 The defence of trading interests

Tuğğār could use their influence to obtain a guarantee from caliphs that they would use force to ensure the safety of their fortune. During the revolt of the ʿAyyārūn in 812 in Baghdad, which occurred during the civil war between Caliph al-Amīn and his brother al-Ma'mūn, the ʿAbbāsid capital suffered from major destruction. The chronicle of al-Masʿūdī reveals that al-Amīn requested his officer Zariḥ to conduct a search among the population of Baghdad and seize any goods of value, for the supply of the army, as well as to restore and consolidate the ramparts.[102] The merchants were heavily affected by this policy. Ibn al-Ǧawzī relates that the *tuğğār* therefore made use of their political influence in order that the merchants could move their assets, which were coveted objects, into the palatine residence to prevent them being looted by the mobs.[103] Al-Masʿūdī reveals that other traders escaped the capital. It is reported that they swore allegiance to al-Amīn's enemy and brother, al-Ma'mūn, and promised him financial support in exchange for the protection of the group.[104]

Moreover, it is said that the *tuğğār* could use their political influence to protect those acting as agents for them, such as travelling merchants, fishermen, and seafarers. Their political influence could be useful to protect and insure that the network functioned efficiently, contracts were being respected, and the goods were being transferred to the Near Eastern urban nodes. This could mean pressuring the authorities in order that certain taxes on imported goods be abolished or at least reduced, as did the *tāğir* Muḥammad b. ʿAbd al-Malik al-Zayyāt, after his appointment as vizier. He used his political influence to combat fiscal abuses, to suppress the taxes collected by the customs officers of Baṣra on the ships coming from South East Asia.[105] *Tuğğār* also made sure that the administration did not impede their trade. In this endeavour, they were able to exploit their wealth to gain access to military or political support. This is evidenced in al-Tanūḫī's collection of *aḫbār*, in particular in an anecdote reporting a conflict that occurred between Ibn al-Furāt, vizier of the ʿAbbāsid ruler al-Muqtadir (895–932), and Ibn al-Ǧaṣṣāṣ, wealthy businessman, former jeweller, and close adviser of the Tulunid emir Ḫumārawayh (884–96). It is said that the vizier, who was known to be ruthless and

[102] AL-MASʿŪDĪ, 6 (1861–77) 468.
[103] IBN AL-ǦAWZĪ (1939) *Muntaẓam fī tawārīḫ al-mulūk wa al-umam,* 8 (Hyderabad) 54, 62, 77.
[104] AL-MASʿŪDĪ, 6 (1861–77) 468. [105] IBRAHIM, M. (1990) 193.

unscrupulous, tried to disrupt the *tāǧir*'s affairs, by discouraging his suppliers and cancelling his business contracts.[106] The origin of Ibn al-Furāt's resentment is not mentioned by al-Tanūḫī. To protect his interests, the jeweller threatened the vizier with a complaint to the caliph, along with a donation of 2 million dīnārs, in return for the vizier's imprisonment. Ibn al-Ǧaṣṣāṣ claimed he would exert his influence to nominate a new vizier, who would 'think of him as his god and benefactor, and be guided entirely by his advice'.[107] Ibn al-Ǧaṣṣāṣ's son indicated that the vizier became anxious for his position and therefore conceded to the merchant's will. The *tāǧir* requested that the vizier 'be henceforth on [his] side and not against [him] in small matters and great, that [he] will not reduce any payment due to him, nor alter any of his contracts nor otherwise injure [his] interests, but will on the contrary protect them and promote [Ibn al-Ǧaṣṣāṣ's] good repute'.[108] It is related that the vizier 'ordered letters to be sent to the provincial finance ministers bidding them treat Ibn al-Ǧaṣṣāṣ's agents with respect, and look after his goods and estates. He also ordered the clerks of the bureau to remove all instructions, which they had introduced tending to the alteration of Ibn al-Ǧaṣṣāṣ's receipts and the increase of his charges.'[109] The popular disaffection for Ibn al-Furāt and the fact that the anecdote was transmitted by Ibn al-Ǧaṣṣāṣ's son may lead one to speculate on the veracity of the story. Nonetheless, this latter was a pious sheikh, and the increasing political influence of *tuǧǧār* in the ninth and tenth centuries, as the literary sources report, make the account plausible. The text emphasizes the progressive loss of a strong imperial and administrative authority to the benefit of a civilian business elite, and the growing power of mercantile capital. It illustrates how essential the support of the most prominent entrepreneur became for the 'Abbāsid rulers from the early tenth century, against the background of the Empire's economic decline after the revolts of the Zanj slaves (869–83) and Qarmatian sect (between 900 and 950).

4.2 *Tuǧǧār* and economic expansion

Alongside the imperial authority, *tuǧǧār*, as great capital-holders, played a significant role as agents in the process of economic expansion in the ninth and tenth centuries across the Near East and the caliphate. Private entrepreneurship emerged from the middle of the ninth century. Shops and workshops were increasingly patronized by them as much as for production and trading bases as investment for rents. When Caliph al-Mutawakkil dismissed Vizier

[106] AL-TANŪḪĪ (1922) 18–21. [107] AL-TANŪḪĪ (1922) 20.
[108] AL-TANŪḪĪ (1922) 22. [109] AL-TANŪḪĪ (1922) 22.

Muḥammad b. ʿAbd al-Malik al-Zayyāt in 847, he ordered his estates—several markets where wheat, oil, figs, and grapes were sold—to be seized.[110] The commercial places belonged to the vizier, who received a rent from each individual shopkeeper. A similar story is reported about the famous jeweller Ibn al-Ǧaṣṣāṣ. It is reported that the authorities also confiscated his properties and wealth after his dismissal during the reign of al-Muqtadir.[111] They seized the Ǧūr palace (dār al-Ǧūr), several properties in Baṣra, as well as various markets and other buildings (*ʿaqāra* or *ʿaqārak*) at Bāb al-Ṭāq in the neighbourhood of al-Karḫ in Baghdad.[112] Bāb al-Ṭāq was then a thriving commercial area, particularly notable for its famous book-market quarter, according to al-Yaʿqūbī.

Tuǧǧār's entrepreneurship was also occurring in Fārs and Egypt from the end of the ninth century,[113] while ʿUmānī and Sirāfī *tuǧǧār*, as famous shipbuilders and owners, considerably favoured the expansion of trade in the Indian Ocean. Al-Masʿūdī, writing before 947, describes Killah [most likely Kedah in Malaya] as a place where cargoes sent by Sirāfīs and ʿUmānīs met the ships that came from China. The ninth-century manuscript on the 'Properties of Gems' of Ibn al-Māsawayh confirms their growing influence in the Indian Ocean trade. Baṣrans and ʿUmānīs controlled pearl fishing in the Gulf of Oman and around the island of Ceylon. This required substantial capital, to harvest the oysters and extract the pearls over a period of six months from April to September.[114] However, pearls were very popular, and their price, determined by weight and form, generally ranged between 500 and 1,000 dīnārs for a pearl between 5 and 7 grams, but could also reach up to 30,000 dīnārs in the case of the 23-gram *munaffaḫ* pearl. It was necessary to furnish the pearl harvesters with appropriate material including pearl baskets, cotton ropes, and stones, as well as ivory nasal protection for the divers. Food was also provided, typically consisting of dates, fish, and bread. Meals were timed to coincide with the completion of the three daily harvests. Additionally, the *tuǧǧār* also paid taxes to moor ships and harvest pearl oysters. The taxes varied according to the type of pearl being purchased and the place. In Ceylon, this tax raised 20,000 dīnārs and a quarter of the yield. The *tuǧǧār* engaged in pearl fishing relied mainly on the local labour force, whose work was overseen by an Iraqi foreman. The foreman was entrusted to pay the salaries of the divers and seamen, as well as the appropriate tax to the local authorities.

[110] AL-ṬABARĪ, Tertia Series (1964) 1376.
[111] AL-TANŪḪĪ (1922) 16; AL-MASʿŪDĪ, 8 (1861–77) 283.
[112] AL-TANŪḪĪ (1922) 17.
[113] See Chapter 4 on textile production in Fārs and the regions of Darabǧird, Ardašir-ḫurreh, and Arraǧan.
[114] IBN AL-MĀSAWAYH (1977) *Al-Ǧawāhir wa ṣifātihā* (Cairo: I. Abdul Salam Rawf) 26–32.

Considering the investment needed[115] and the time required to make it profitable, it is unsurprising that pearl fishing became monopolized by the *tuǧǧār*. Beyond this, this example shows how this elite had control over large portions of the local population of interstitial societies through employment.

Furthermore, ʿUmānī *tuǧǧār* emerged in the tenth century as the most important Abyssinian slave dealers, controlling also a large trade in ivory, amber, and gold from Nubia. An extraordinary sailor's tale from the mid tenth century tells of the abduction of an East African slave. Although the tale is clearly a literary creation, the narrator, a Muslim slave trader, describes sea-world trading routes in 922 and the significant involvement of ʿUmānī *tuǧǧār* in the slave trade.

From 800 onwards, *tuǧǧār* came therefore to form a powerful elite upon which the ʿAbbāsid caliphs were able to depend during the troubled times before the break-up of the unity of the Muslim world in the tenth century. The redefinition of the traders' social status, as well as their enrichments, led to their increasing involvement in the administration of the Islamic Empire. Nevertheless, this phenomenon was not marked by a transfer of political power but based on a convergence of interest. The *tuǧǧār* came to constitute a new social 'class' and community politically aware and capable of acting to promote their common interests.

[115] Al-Ǧāḥiẓ further notes that the *tuǧǧār* never chartered a single ship, in case it suffered a wreck and lost its load. Al-ǦĀḤIẒ (2012) *Kitāb al-buḫalāʾ* (Beirut: Alaalami) 24; (1951) 20.

Conclusion to Part IV

From 700 to 950, artisanal labour remained anchored in late antique traditions, with a continued reliance on slaves, Christians, and Jewish workers, as illustrated through their signatures on Umayyad and early ʿAbbāsid artefacts. Women continued to work in retail, crafts, and most commonly textile production; occasionally they participated in the administrative sector, sometimes carrying heavy responsibilities as *qāḍī*'s auxiliaries.[1] The continued involvement of women and juveniles in production after the rise of Islam, as well as the perpetuation of apprenticeship, is evidenced by the discovery of female signatures in al-Fudayn in Jordan, and of signatures of apprentices and their master side by side, depicting professional affiliation. The evolution of economic processes and the establishment of Islamic norms and beliefs nonetheless affected the status and social position of craftspersons. The rise of entrepreneurship in the eighth and ninth centuries challenged the traditional conditions of work, through an increased reliance on free and skilled wage labour. The rise of Islam also meant that ethnicity and religious beliefs increasingly became drivers in the division of the workforce, as Islam forbade its followers the practice of specific crafts. Workers ceased to have an official institutional recognition, and religious affiliation began to inform socio-professional hierarchies.

Some merchants, respected in the Islamic traditions, experienced, by contrast, an exceptional rise in their social and political status. Literary documents inform us that the transformation of the urban economy[2] favoured their

[1] TILLIER, M. (2009) 'Women before the Qāḍī under the ʿAbbāsids', *Islamic Law and Society* 16(3–4): 280–301.

[2] This part argues that economic processes played a role in shaping the medieval society, in contrast with Karl Polanyi's argument that, before the great transformation and the establishment of a modern capitalist system, societal norms exclusively controlled the economy. ADAMAN, F., DEVINE, P., OZKAYNAK, B. (2007) 'Reinstituting the Economic Process: (Re) embedding the Economy in Society and Nature', in M. Harvey et al. (eds.) *Karl Polanyi. New Perspectives on the Place of the Economy in Society* (Manchester: Manchester University Press) 93–113.

Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950). Fanny Bessard,
Oxford University Press (2020).
DOI: 10.1093/oso/9780198855828.001.0001

enrichment, which supported, for some of them, their progressive involvement in entrepreneurship and their penetration into the governmental spheres from the late eighth and ninth centuries. Merchants certainly remained unequal, as in late antiquity, in prestige and dignity. Yet, some former slave dealers, textile traders, and jewellers emerged as politically and religiously empowered *tuǧǧār* under the early ʿAbbāsids. During the period from 762 to the anarchy in Sāmarrā after the reign of al-Mutawakkil in 862, new opportunities emerged for these *tuǧǧār* to fill positions of authority, when caliphs engaged in a more meritocratic approach[3] to government. Alongside an emerging administrative elite of secretaries and palace servants, such as the ex-slave al-Rabīʿ b. Yūnus, who was a chamberlain and close confidant of Caliph al-Manṣūr, merchants increasingly played a vital role in both the politics and the culture of the period, vis-à-vis the patrimonial landowners.

The urban economic efflorescence, combined with the implementation of an ideology supporting profit-making and merits, between the late-eighth- and the late-ninth-century ʿAbbāsid rule, reshaped Near Eastern society and determined the growing participation of former merchants in political and financial decision-making. They were afforded opportunities to contribute, alongside imperial nobility, in shaping the economies of the Near East and its peripheries in the early Middle Ages, through entrepreneurship and financial assistance, but also through their impact on foreign diplomacy, global and local policies.

[3] This argument is further developed in SOURDEL, D. (1999) *l'État imperial des caliphes abbasides: VIIIe-Xe siècle* (Paris: Presses universitaires de France) 212–13; see also, on court and the rise of a civil elite of bureaucrats, KENNEDY, H. (2016) *The Prophet and the Age of the Caliphates* (London: Routledge) 363; EL-CHEIKH, N. M. (2012) 'The Abbasid and Byzantine Courts', in S. Foot, C. F. Robinson (eds.) *The Oxford History of Historical Writing: Volume 2: 400–1400* (Oxford: Oxford University Press) 517–38.

Conclusion

The foundation of the Muslim world from 700 to 950 was a seminal period in world history, when the Near East enjoyed an age of political unity, prosperity, and cultural dominance. This age of progress has escaped serious scholarly attention, as the focus has tended to be on the earlier transition between the death of Justinian in 565 and the Arab-Muslim conquests in the seventh century. Recent scholarship has been preoccupied with tracing continuities. Rather than putting the emphasis on late Roman and Persian inheritances, this book has argued that the institutional innovation undertaken by early Muslim caliphs from 700 resulted in the urban economic successes, which recent archaeological endeavours have unveiled. Rather than viewing the early Islamic economy as the almost serendipitous upshot of the political integration of the Near East, this book locates the engine of economic change squarely within the early Islamic political elite, whose commercial practices, subjectivities, and theories brought about a thoroughgoing restructuring of trade and production, with a clear rupture with tradition occurring after 800.

This economic effulgence after the rise of Islam rested on the invention of two spheres, one of domesticity and the other of labour. The Umayyad and early ʿAbbāsids did not simply appropriate Roman and Persian economic infrastructures, but also introduced a novel order maximizing trade and production. As Jairus Banaji argues, the main economic legacy of late antiquity to Islam was a highly monetized economy and sophisticated structures, which the Muslims were able to inherit and, as this book demonstrates, to refine or adapt. Spatial segregation of productive processes, market enhancements, as well as increased specialization constituted significant structural forces at work underlying the success of the urban economy in the eastern post-Roman world.

Specialized economic quarters emerged in the earliest period of Islam in the medieval settlements and late antique cities of the Levant, where abandoned Roman buildings (temples, theatres, hippodromes, or baths) were henceforth privatized and transformed to take on artisanal functions. Gradually, craftspeople were transferred outside the city walls, such as in Baghdad, Bālis, or in Central Asian cities, from the late eighth to the tenth century, as residential and economic activities started to become more discretely conceived and

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practised. The extrusion of clusters of workshops to the immediate outskirts was motivated by a major change in the exercise of power. This took the form of a progressive state *desideratum* to separate power, domestic life, and labour, along with the emergence of palatial cities solely reserved for the court, such as Sāmarrā in Iraq. This phenomenon of segregating crafts, seen in its infancy in the Roman world (for instance, in the salting fish of Sabratha in Libya and the fulleries of Timgad),[1] was thus universalized across the Islamic *mašreq*. This shows the role of Muslims in economy, systematizing a Roman practice that later developed in medieval and modern Europe. The concentration of production in specific parts of western medieval towns is well known and has been identified, for instance, in London by archaeological excavations.[2]

The analysis of the factors leading to a more localized concentration of crafts and marketplaces after the rise of Islam in the Near East suggests that this process, long defined as an *orientalization* of the urban fabric, was in fact deliberately programmed by imperial authority. It rested on the evolution of the patronal system, from private and individual to imperial, which explains the Near Eastern and European *diverging* economic path after the fall of Rome. This pan-Islamic shift served fiscal, ideological, and political purposes. Apart from Byzantium, the early Islamic world was the only post-late antique society to preserve the structures of public taxation. It retained traditions and mechanisms of collecting rents on craftspeople and retailers inherited from both the late Roman and Sasanian Empires, while they were lost in the post-Roman West. By fostering the growth of production and trade, the new Muslim power was able to collect substantial income. These rents provided essential resources for the imperial authority, which no longer derived its wealth solely from landownership. The new Muslim power was also able to affirm its presence in cities with predominantly Christian and Zoroastrian populations. Propagating places of craft and retail, caliphs encouraged the allegiance of the people. They were reminded of the benevolence of the sovereigns, with inscriptions carved in stone or mosaics placed on the edge of the newly-founded marketplaces, such as those of Silvanus Street in Baysān to the glory of Caliph Hishām b. ʿAbd al-Malik in the early eighth century. Such evidence provides us with a model of how the relatively peaceable spread of Islam occurred in this part of the world.

Areas dedicated to production and retail underwent a structural evolution during the eighth and ninth centuries. The conditions of production witnessed the decline of individual labour to the benefit of the systematization of the late Roman nucleated workshop model such as in Jarash, Baysān, and Bālis, as well

[1] WILSON, A. (2002) 'Urban production in the Roman world: the view from North Africa', *Papers of the British School at Rome* LXX: 231–73.

[2] SCHOFIELD, J., VINCE, A. (2003) *Medieval Towns. The Archaeology of British Towns in Their European Setting* (London: Continuum) 144.

as the development later from the ninth century of integrated manufactories based on an embryonic form of the division of labour. It is likely that the rise of these modes of production contributed to increasing the separation between professional and family life, which were largely integrated in Roman times. While Roman urban dwellings exhibited the wealth and social prestige of their owners, as in Pompeii and Apamea, the emphasis was given to the 'confinement' of the family group and the protection of private life after the rise of Islam.

The type of marketplaces prevalent in the first centuries of the Islamic Near East reveals the major influence that late antique heritage played in the formation of commercial spaces after the Muslim conquests. This most likely arose from the absence of purpose-built commercial architecture in pre-Islamic Arabia, from whence the Muslim authorities came. Nevertheless, the traditions inherited from late antiquity did not overshadow Near Eastern marketplaces advancing new characteristics. The adaptions to the marketplaces that occurred in the centuries following the Arab conquest were shaped by specific commercial dynamics relating to the expanding commercial needs of the Islamic caliphate from 700 to 950. In the eighth century, they began to acquire specific characteristics, which distinguished them from late antique marketplaces, by promoting their efficiency. *Funduq* and *ḫān* preserved the welcoming function of late antique inns as in St Simeon, while also acquiring an additional role as warehouses and centres for commercial transactions, as found in Mosul. Furthermore, the early Islamic *sūq* was not simply a continuation of the late Roman and Sasanian shops of the Near East, although influenced by pre-existing institutions. They were increasingly dedicated solely to mercantile transactions, in contrast to their forerunners, which constituted places of retail, production, and home to craftspeople. A pronounced differentiation was established between the activities of craft making and trading. The passage from the *ergastērion* and *wāzār* to the *sūq* was accompanied by the specialization of the profession of shopkeeper and its increasing involvement in religious learning, as a way to forge the law to fit with the practice.

A cross-analysis of economic development in the Levant, Iraq, and Central Asia shows that these transformations in the location of craft, trade, and retail in the urban environment or in economic processes affected the entire caliphate, which is indicative of the level of integration attained in the early Islamic economy. However, not all areas were affected simultaneously, the Levant and Iraq being touched obviously first before Central Asia, which was conquered later and suffered from significant destruction in the early eighth century, witnessing a renewal of its economy only from the ninth century.

Closely linked to the success of the urban economy after the rise of Islam were institutional and religious reforms. The reforms of coinage, the proliferation of mints, and the vast amount of hoarded wealth put back into circulation, which must certainly be located in a continuous history of monetization

going back to Constantine and the early Sasanians, constituted both a symptom and a primary trigger of economic development. The development of urban economy also relied on the influence of Islamic morals and its approach to consumption vis-à-vis savings. The use of money as a measure of value and instrument of trade was encouraged, whereas ostentatious accumulation was condemned. In parallel, the changing regime and officials responsible for regulation, in the context of a conscious Islamification of daily life, favoured economic growth. Islamic traditions were able to limit the influence of power on commerce and ensure the independence of market institutions, hitherto closely regulated by the late Roman and Sasanian authorities during the reign of the Persians Kawad I (488–531) and Khosrow I (531–79). Under the influence of antique heritage and against the liberal teachings of the Prophet, the Umayyads and the early ʿAbbāsids intervened in order to collect taxes, monitor prices, or even guarantee the honesty of transactions through the intermediary of a market supervisor. Nonetheless, state intervention remained much more modest than was the case during late antiquity. This partial freeing up of craftspeople and traders would have favoured the development of financial instruments and exchange, as well as helped make commerce the mainspring of urban growth and prosperity from 700 to 950. The interdependence of marketplaces and mosques illustrates the progressive Islamization of economic life. It also highlights the complex interaction between politics and economics at that time.

The early medieval urban economic dynamism in the Near East influenced human behaviour, individually and communally. This book investigated the way in which economic and religious changes characterized social hierarchy, class identity, and the evolution of gender roles. There is much more, of course, to explore regarding the lives of craftspeople and traders in the ninth- and tenth-century caliphate (which remain largely understudied in contrast to the later period of the eleventh- to twelfth-century Near East and the Ottoman era) and this will be the subject of a further study.

The early Islamic politico-economic order contributed to the emergence of a new elite whose primary interest lay henceforth in capital and commerce rather than patrimonial landowning. The weakening of the late antique clerical and landowning ruling elite allowed merchants to emerge rather more openly into the historical light of day and assert their authority. This mercantile elite of *tuǧǧār* became a valuable supporter of the caliphate from the early ninth century. As we have seen, some *tuǧǧār* came to occupy coveted administrative posts under the ʿAbbāsid dynasty, from the caliphate of al-Maʾmūn (813–33) onwards, then under the reign of his successors al-Muʿtaṣim (833–42) and al-Wāṯiq (842–7). The adhesion of many merchants to Muʿtazilite thought, which under the caliphate of al-Maʾmūn became the official doctrine of the state, could, one supposes, have facilitated their entry into the government. The caliphs relied heavily on this elite in times of

political unrest, marked by the hostility of Arab notables to al-Ma'mūn and his policy of alliance with the Shi'ites, then by the riots of the people of Baghdad against the regime of Caliph al-Mu'taṣim. In return for the financial and political support they provided for the authorities, *tuǧǧār* were, according to the literary documentation, able to claim social privileges, or even defend the interests of their fellows. They therefore came to constitute a new social class and a community politically aware and capable of acting to promote common interests. From 800 onwards, this elite increasingly acted, alongside imperial authority, as a structuring agent in urban craft and trade in the Near East and its peripheries, supplying credit, protection, controlling sea and land routes, as well as influencing local market strategies. While the eighth century still constituted an age of continuity with late antiquity, the influx of merchant capital in urban economy from the ninth century explains the sudden rupture in economic processes visible archaeologically. *Tuǧǧār* develop a clear concept of investment for the sake of investment, with profits being ploughed back to reinvest, and of capital generating capital: al-Iṣṭaḫrī, writing in the early tenth century, indicates that the merchants of Fārs were driven by what he describes as their 'passion to accumulate capital'. As Jairus Banaji states, the penetration of merchant capital into production was a far more advanced process in Islam, two or three centuries ahead of the Italians.

Although the innovations of the early Islamic economy need to be relativized, the Muslim conquests and the rise of Islam brought about a notable rupture. From 700 to 950, the Near Eastern urban economy underwent a great efflorescence, powered by a policy of giving value to capital goods. The originality of this development was based on the syncretism of structural, social, and legal traditions, both ancient and pre-Islamic, while the recommendations and reservations made by the Prophet of Islam were usually bypassed. In the eighth and ninth centuries, until the end of the political unity of the 'Abbāsid caliphate, the urban economy constituted a true means of support for asserting and maintaining caliphal authority.

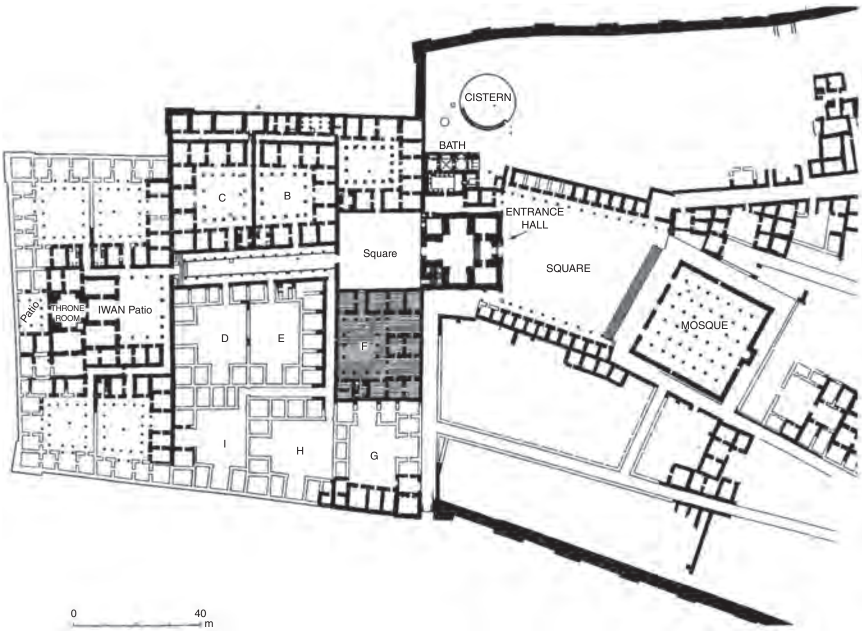


Fig. A1 ʿAmmān: plan of the citadel. (Courtesy of Ignacio Arce)



Fig. A2 ʿAmmān: detail of shops built on the western side of the esplanade, next to the monumental entrance hall. (© F. Bessard)

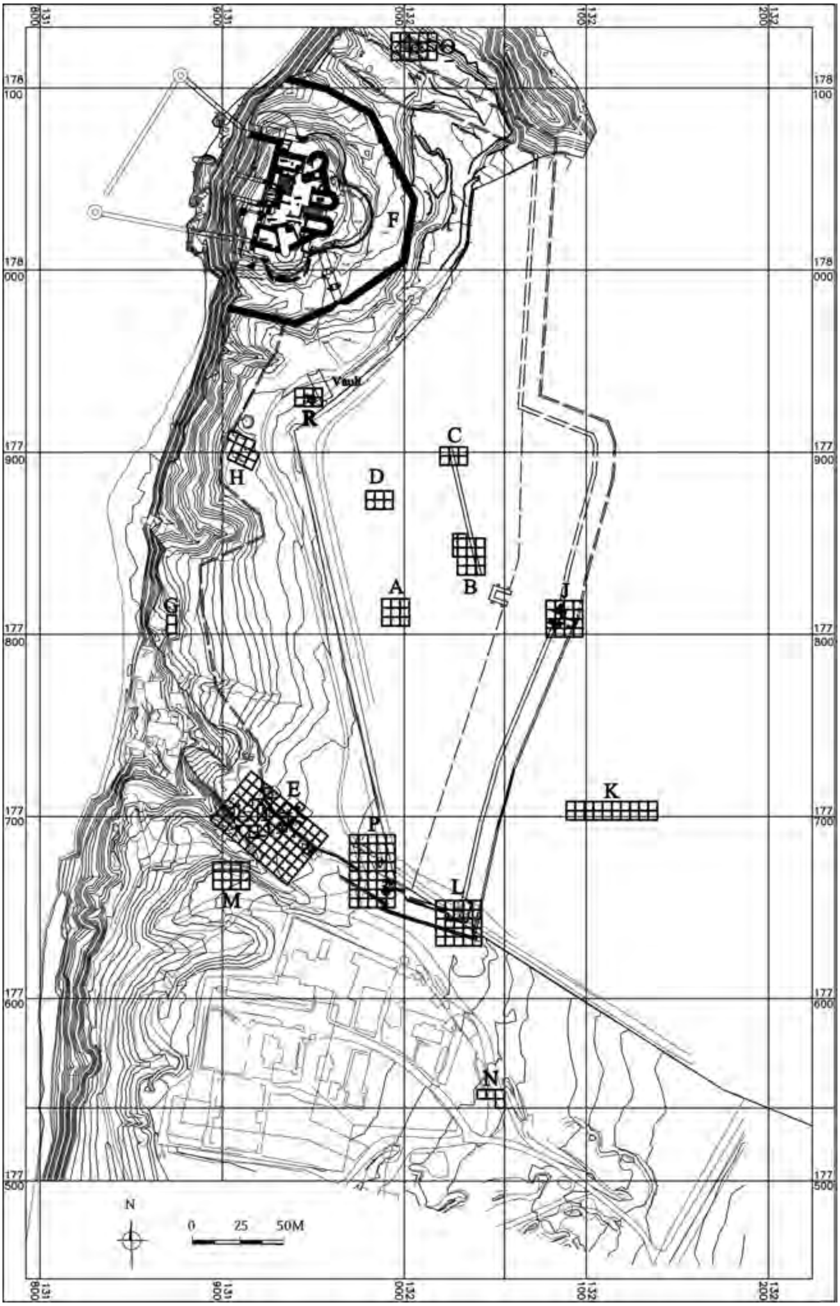
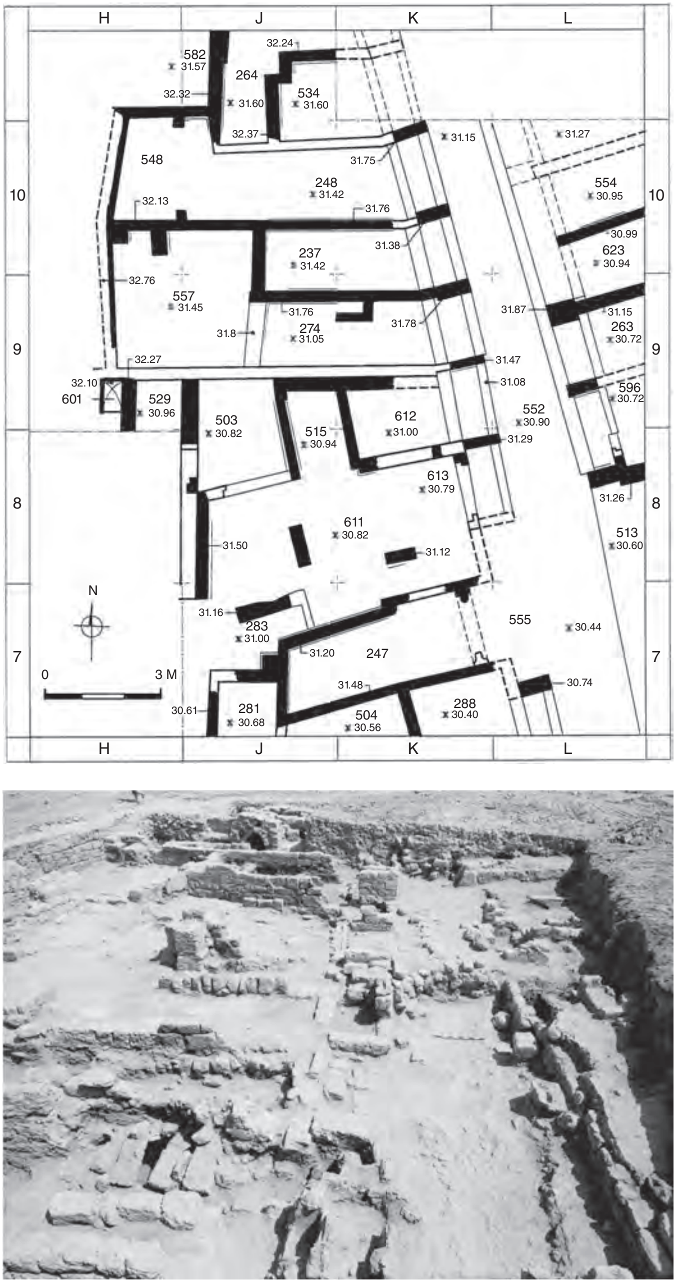


Fig. A3 Apollonia-Arsūf: map of the urban settlement and location of the main excavations. In areas B and C, excavated in 1977 by I. Roll (Tel-Aviv University) and E. Ayalon (Haaretz Museum, Tel-Aviv), an Umayyad *sūq* was discovered. (Apollonia-Arsūf Excavation Project)

(a)



(b)

Fig. A4 Apollonia-Arsūf: (a) Map (b) Detail of the shops from the early Islamic *sūq*. (Apollonia-Arsūf Excavation Project)

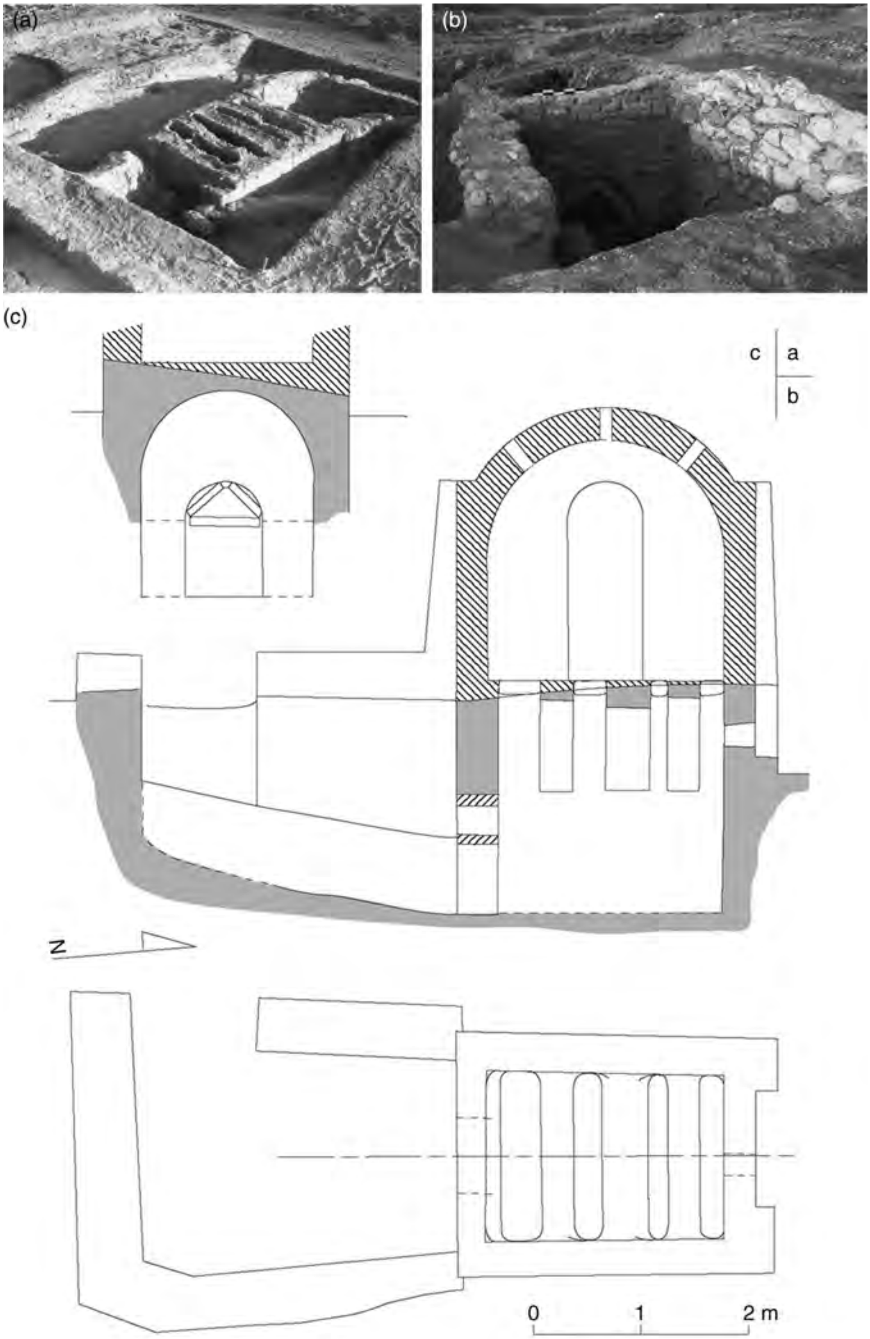


Fig. A5 Bālis: kiln 2f. (a) Detail of the rectangular kiln. Its heating chamber is still intact and covered with arches that originally supported the firing chamber of the furnace. A small room built against the southern wall of the kiln with reused material (mainly rubble, pottery shards, mud bricks) served to access the fireplace. (b) Detail of the door of the fireplace in the kiln 2f. (c) Map and cross section of kiln 2f. ((a–c) Courtesy of J. Thiriot)

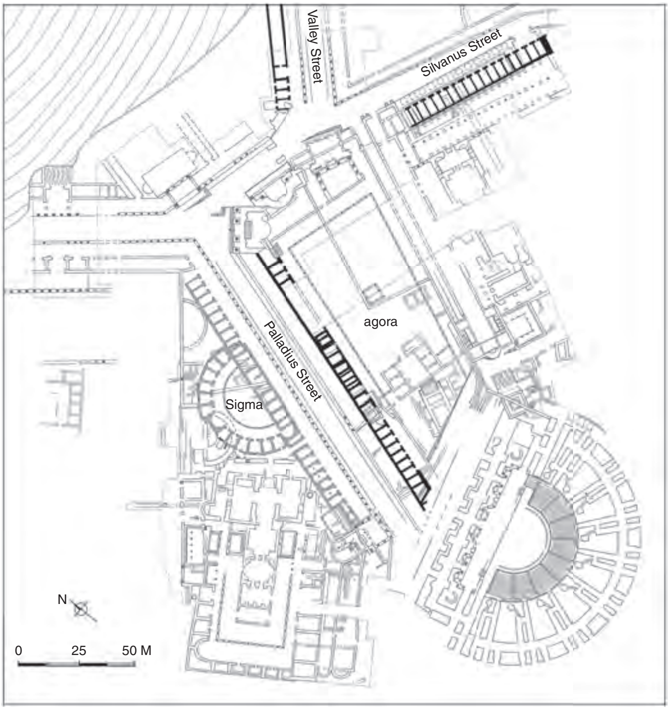


Fig. A6 Baysān: map of the late Roman and Umayyad marketplaces. (Mazor, G., Bar-Nathan, R. 1998. Courtesy of the Israel Antiquities Authority)



Fig. A7 Baysān: detail of late Roman shops along Valley Street, reoccupied and extended after the rise of Islam. At the time of the Umayyads, those shops were extended onto the pavement up to the stylobate with walls often made of reused material such as column drums placed vertically or architrave blocks. (Foerster, G., Tsafrir, Y. 1993)



Fig. A8 Dehes: press 10. The press underwent two stages. Originally, a winch must have been fitted in the casing (1) sealed by a block carved south of the basin (2). In the early days of Islam, it is supposed that this winch was removed because its casing was sealed to the edge by a block. In its stead, two casings (3) were pierced in order to maintain the frame of a new lever, and a pit (4) was dug south of the platform to stabilize the counterweight block of the screw mechanism. (Courtesy of O. Callot)

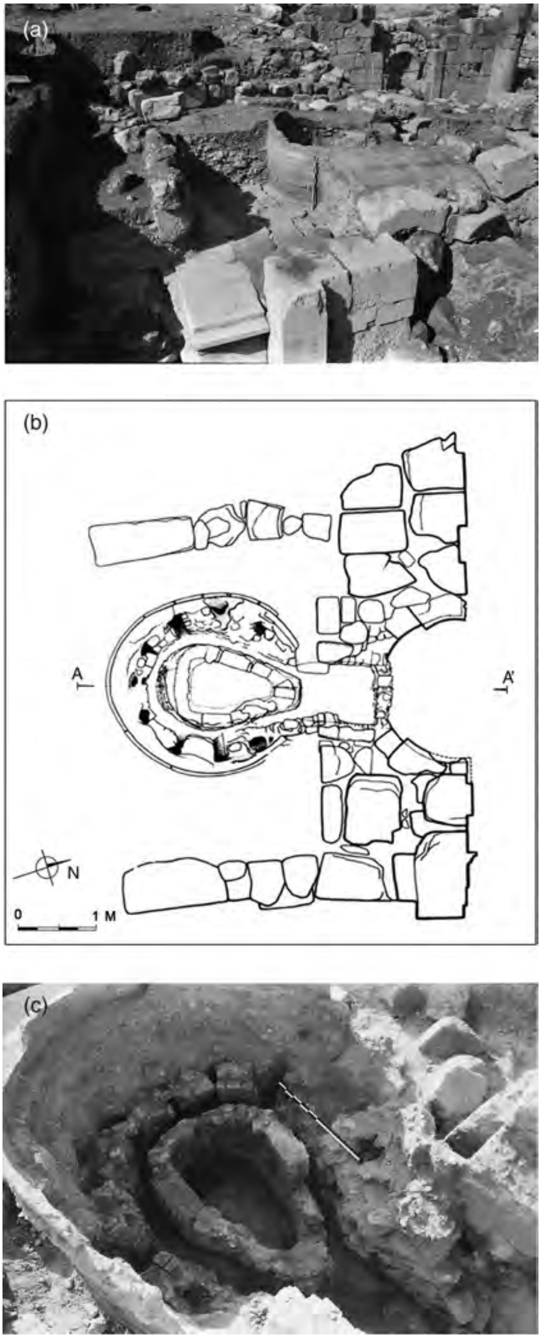


Fig. A9 Jarash, north theatre: kiln B/IV. (a) General view of kiln B/IV. (b) Plan of kiln B/IV. (c) Heating room of kiln B/IV. View of the circular room in the extension of the fire chamber containing a pear-shaped core, and of the pounders which originally supported the hearth where the load to be fired was placed. (d) AA' cross section of kiln B/IV. (e) View of the kiln's opening, of the fire chamber, and the heating room through the niche of the postscaenium. ((a, c, and e) © Archives of the DoA, ʻAmmān. (b and d) Schaefer, J. 1981–3)

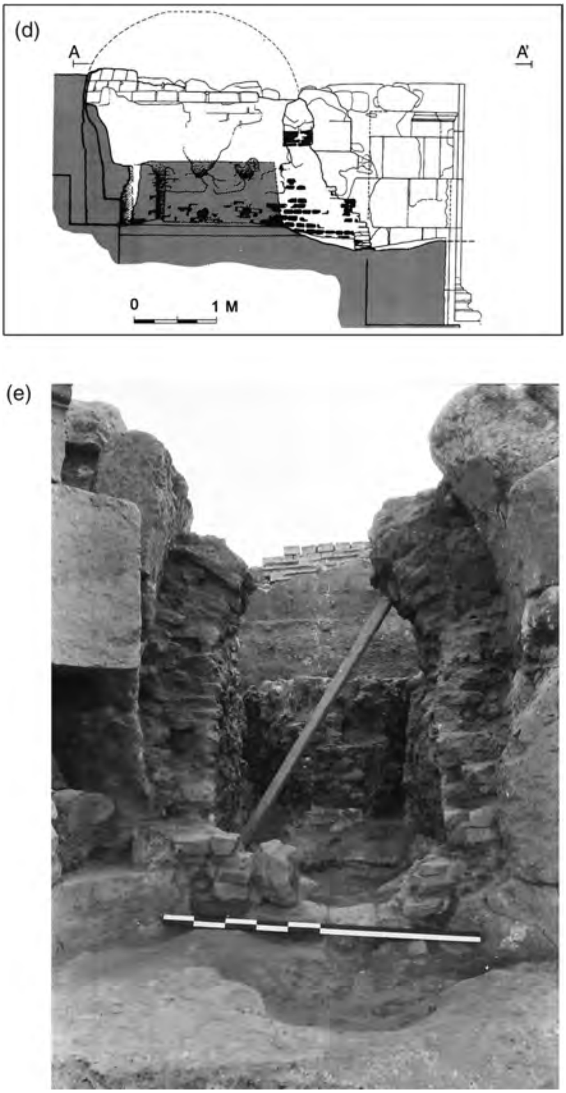


Fig. A9 Continued.

(a)



(b)



Fig. A10 Jarash, north theatre: kiln A/XI. (a) General view of the kiln. (b) Heating room of kiln A/XI. ((a and b) © Archives of the DoA, ʻAmmān)

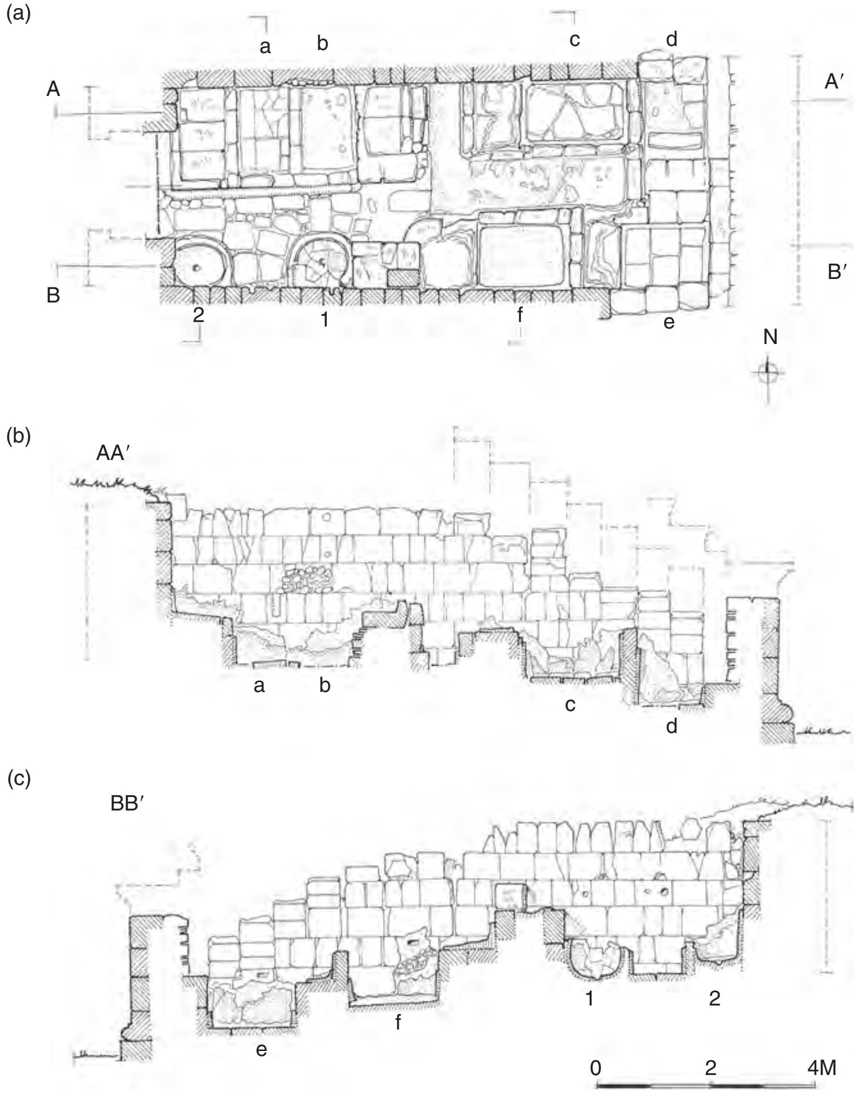


Fig. A11 Jarash, hippodrome: W11. (a) Plan of room W11 and its dyeing workshop. (b) AA' cross section of the Umayyad workshop. (c) BB' cross section. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)

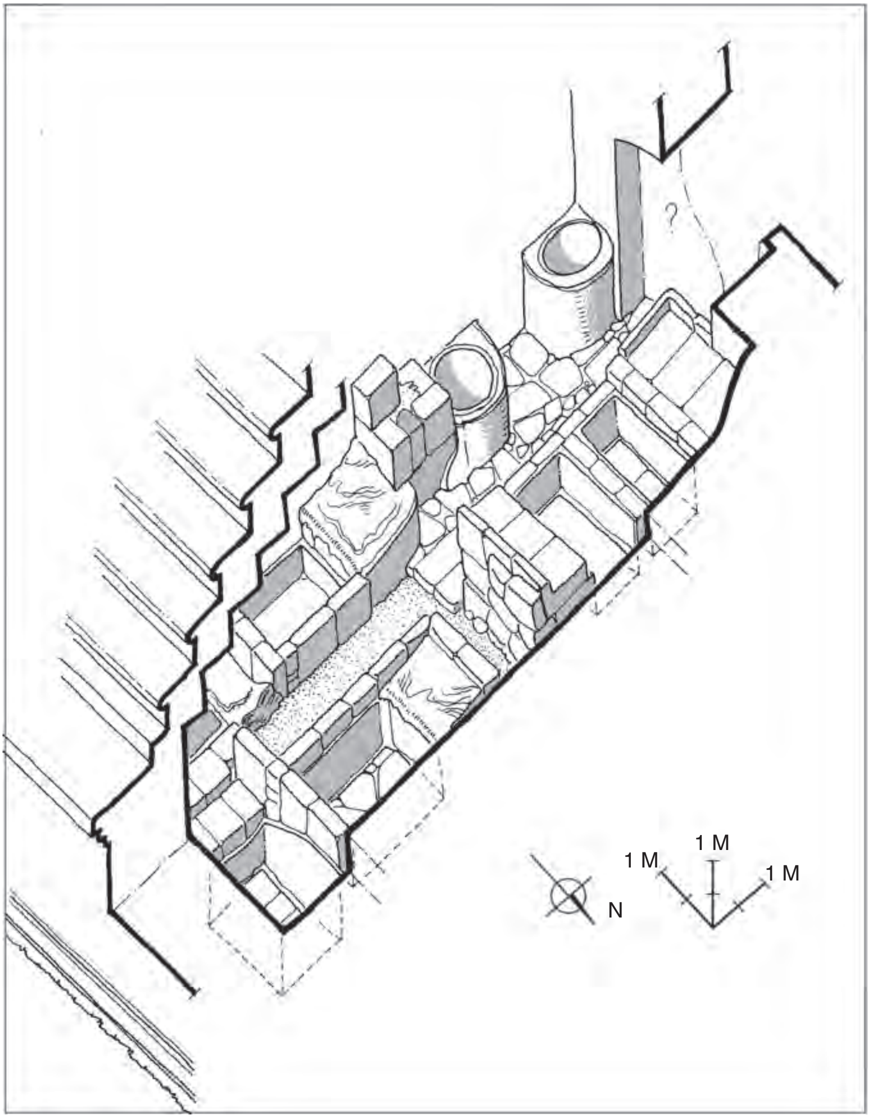


Fig. A12 Jarash, hippodrome: axonometric rendering of workshop W11. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)



Fig. A13 Jarash, hippodrome: view of workshop W11. (© F. Bessard)

(a)

(b)



Fig. A14 (a) Jarash, hippodrome: workshop W11. (b) Drain in the washing area, along with the basins used for washing fabrics. (© F. Bessard)

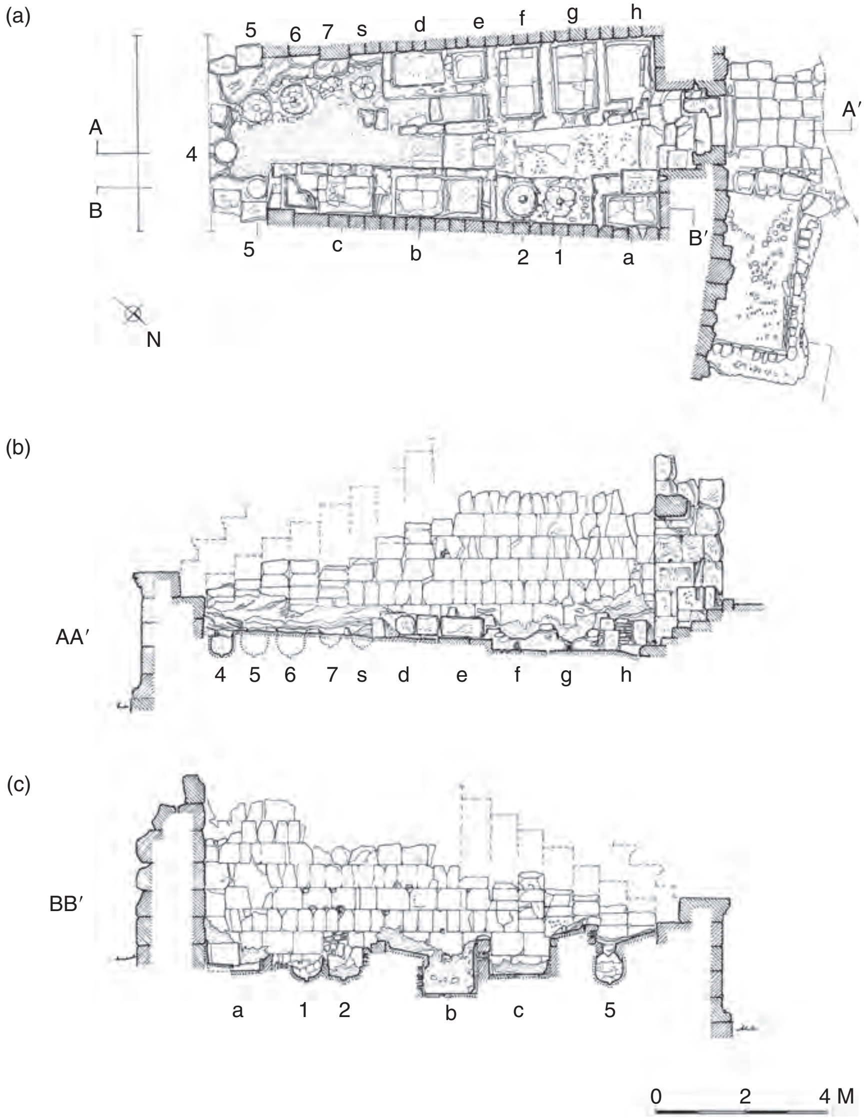


Fig. A15 Jarash, hippodrome: W6. (a) Plan of room W6 and its dyeing workshop. (b) AA’ cross section of the Umayyad workshop. (c) BB’ cross section. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)

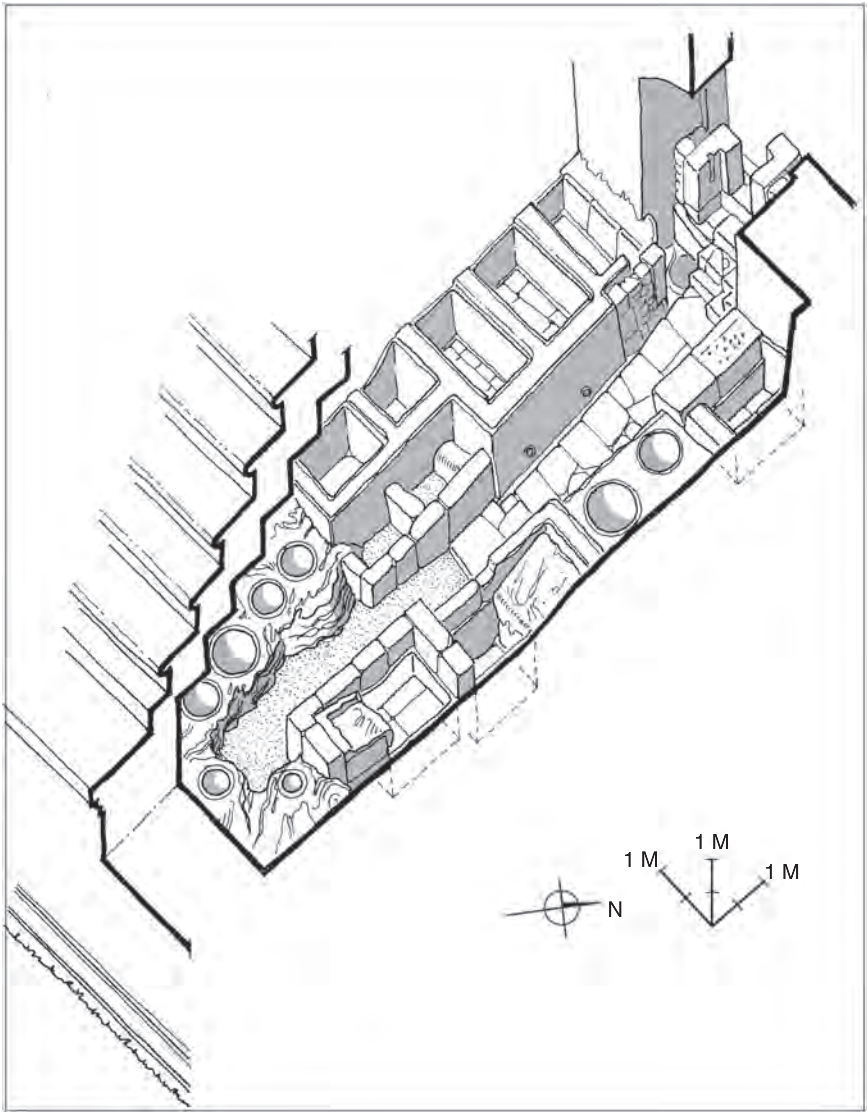


Fig. A16 Jarash, hippodrome: axonometric rendering of workshop W6. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)



Fig. A17 Jarash, hippodrome: view of workshop W6. (© F. Bessard)

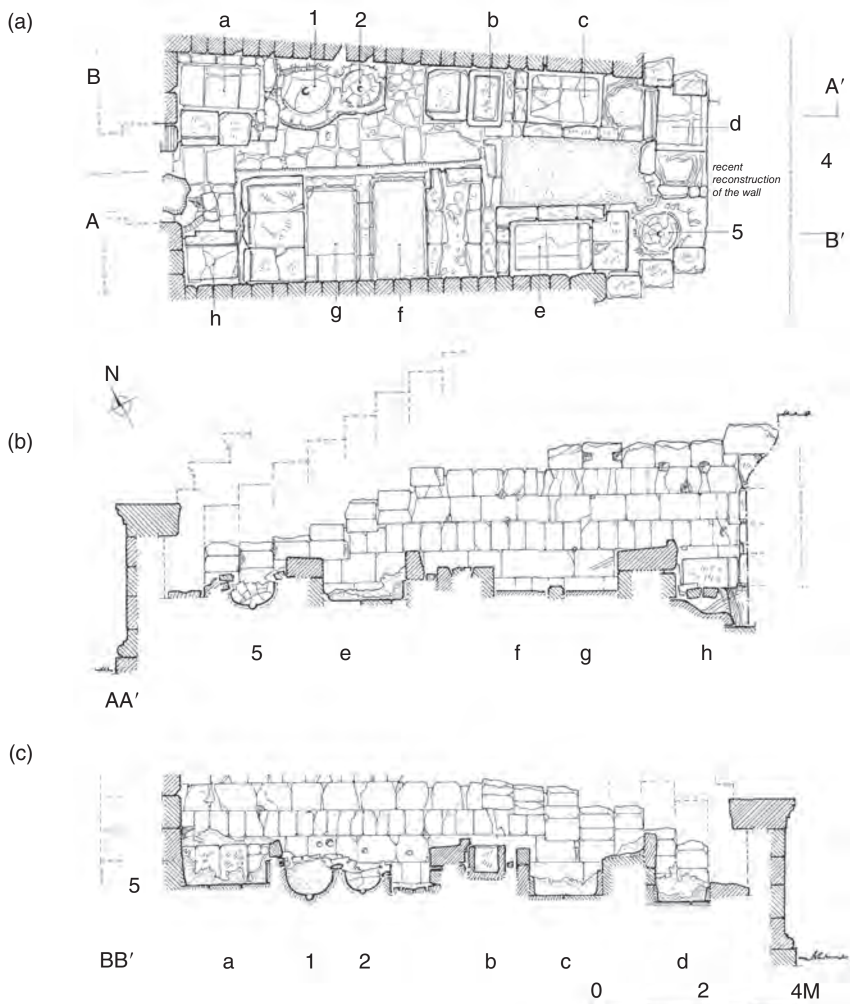


Fig. A18 Jarash, hippodrome: E5. (a) Plan of room E5 and its dyeing workshop. (b) AA' cross section of the Umayyad workshop. (c) BB' cross section. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)

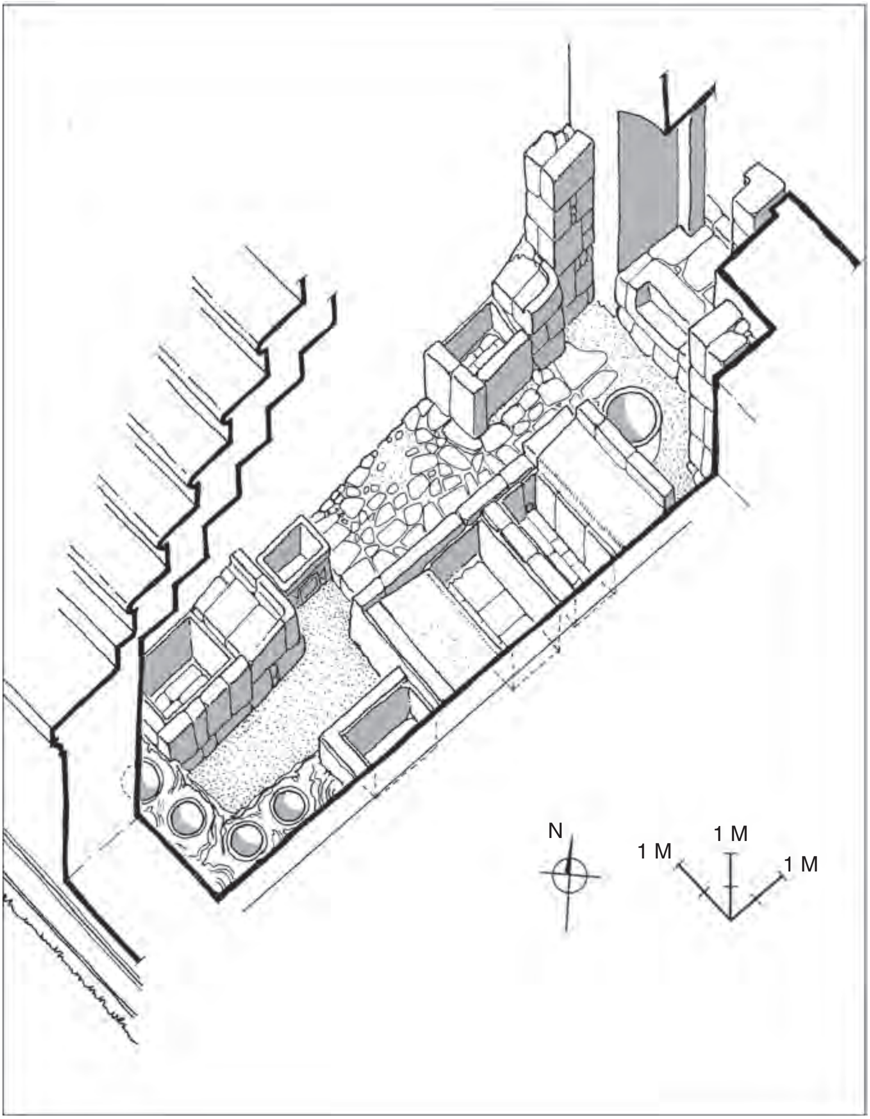


Fig. A19 Jarash, hippodrome: axonometric rendering of workshop E5. (© O. Callot—Mission Ifpo, Bessard-Bonneric-Callot)



Fig. A20 Jarash, hippodrome: view of workshop E5. (© F. Bessard)



Fig. A21 Jarash, hippodrome: view of the workshop's vats and drains E5. (© F. Bessard)



Fig. A22 Jarash, hippodrome: reuse of a small Roman ossuary as dyeing basin in workshop E5. (© F. Bessard)



Fig. A23 Jarash, hippodrome: aerial photograph of the western workshops W14–15. (© F. Bessard)



Fig. A24 Jarash, hippodrome: aerial photograph of the eastern workshops E4, 5, 6, 7. (© F. Bessard)



Fig. A25 Palmyra: shop b3, general view of the facility with its two storage bays, the floor of which is coated. (© F. Bessard)



Fig. A26 Palmyra: shop b9. Shop built with reused materials. View of the selling and storage spaces in the background, divided into two bays. (© F. Bessard)

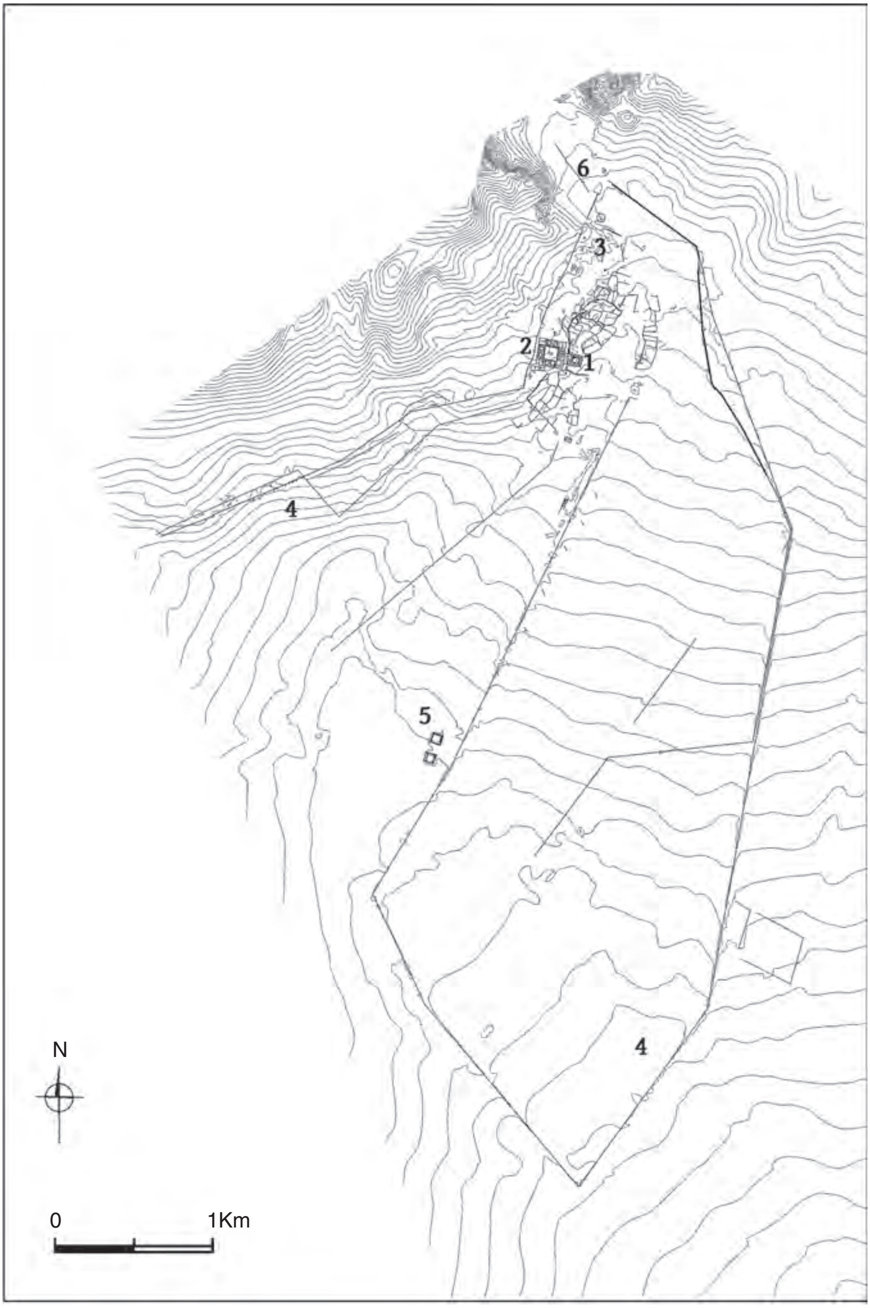


Fig. A27 General plan of Qaṣr al-Ḥayr al-Šarqī [1- palace, 2- large surrounding wall, 3- northern building, 4- irrigated enclosed plot of land, 5- southern castles, 6-aqueduct and watermill]. (© D. Genequand)



Fig. A28 Qaṣr al-Ḥayr al-Šarqī: view of the oblique waterfall of Qaṣr al-Šarqī's watermill, located on the aqueduct originating from al-Kawm. (© D. Genequand)



Fig. A29 Raqqa: detail of a potter's kiln excavated in Tell Aswad in 2010. (© F. Bessard)



Fig. A30 Ruṣāfa: general view of the Umayyad shops west of the cathedral. (© F. Bessard)



Fig. A31 Ruṣāfa: shop divided into two distinct spaces, one for sales and the other for storage, following the model of the Umayyad *sūq*s in Jarash and Palmyra. (© F. Bessard)

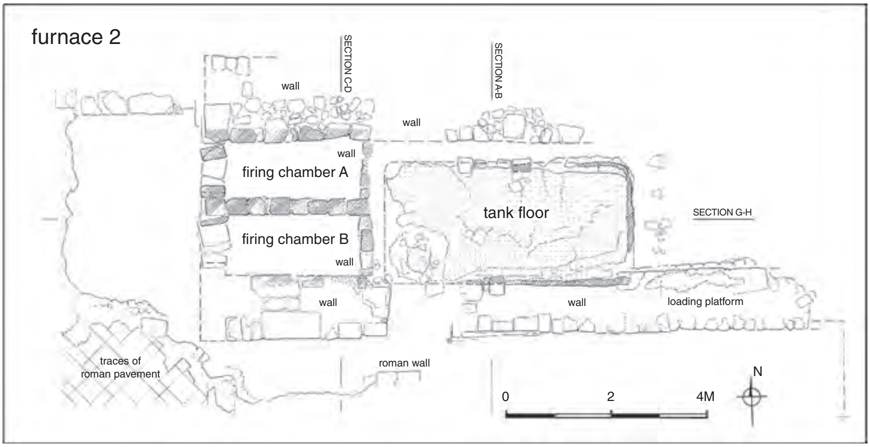


Fig. A32 Tyre: plan of furnace 2. (F. Aldsworth et al. 2001)



Fig. A33 Tyre: view of furnace 2. (F. Aldsworth et al. 2001)

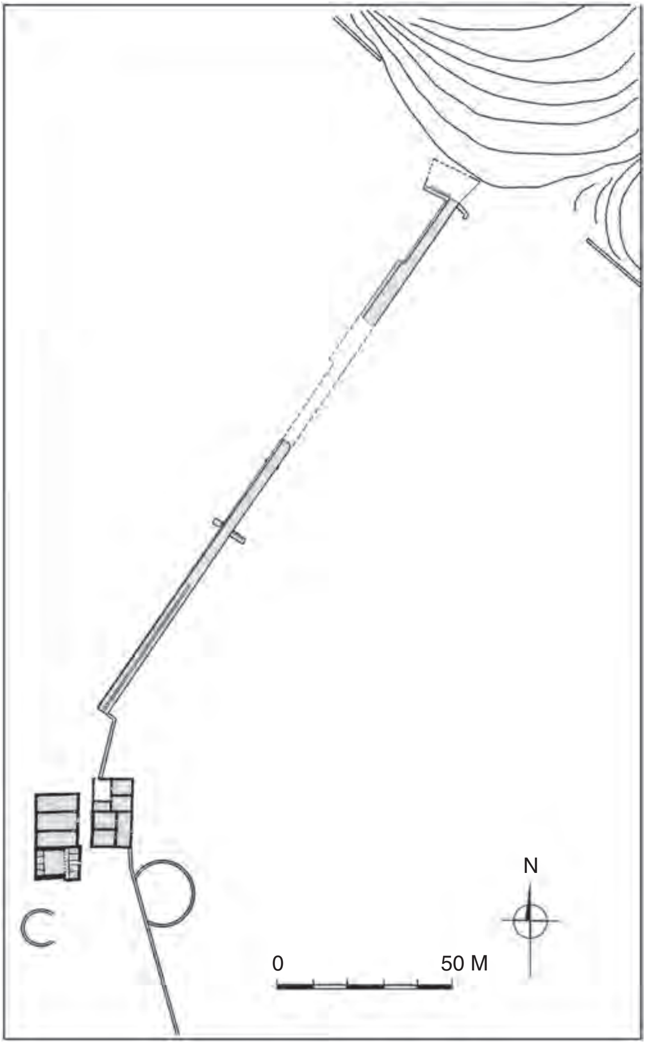


Fig. A34 Wādī al-qanāṭir: plan of the archaeological site and its wine press. (© D. Genequand)

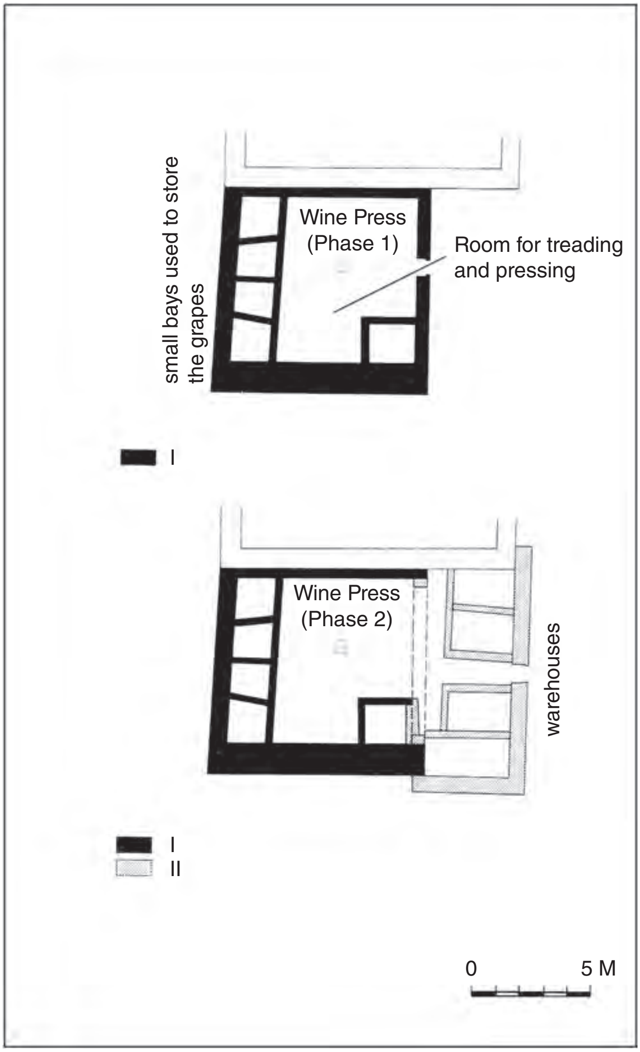


Fig. A35 Wādī al-qanāṭir: plan of the two successive stages of the press. The first stage featured a room for treading and pressing. There was a vat in its south-east corner, and at its centre was an anchor stone used to fit the base of a screw press with a vertical axis. Four small bays used to store the bunches of grapes bordered the corridor. During the second stage, the press was extended by the building of four additional storage bins. (© D. Genequand)

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